Air Quality
ENVIRONMENTAL QUALITY

ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

MICHAEL A. ABRACZINSKAS
Acting Director

DRAFT

Avnish Madan
VP of Operations
StarPet, Inc.
801 Pineview Road
Asheboro, NC 27203

SUBJECT: Air Permit No. 08157T12
StarPet, Inc.
Asheboro, Randolph County
Facility ID No.: 7600276
Fee Class: Title V

Dear Mr. Madan:

In accordance with your completed Air Quality Permit Application for an initial Title V permit received December 6, 2013, we are forwarding herewith Air Quality Permit No. 08157T12 to StarPet, Inc., Asheboro, North Carolina authorizing the construction and operation of the emission source(s) and associated air pollution control device(s) specified herein. Additionally, any emissions activities determined from your Air Quality Permit Application as being insignificant per 15A North Carolina Administrative Code 02Q .0503 have been listed for informational purposes as an "ATTACHMENT." Please note the requirements for the annual compliance certification are contained in General Condition P in Section 3. The current owner is responsible for submitting a compliance certification for the entire year regardless of who owned the facility during the year.

As the designated responsible official it is your responsibility to review, understand, and abide by all of the terms and conditions of the attached permit. It is also your responsibility to ensure that any person who operates any emission source and associated air pollution control device subject to any term or condition of the attached permit reviews, understands, and abides by the condition(s) of the attached permit that are applicable to that particular emission source.

If any parts, requirements, or limitations contained in this Air Quality Permit are unacceptable to you, you have the right to request a formal adjudicatory hearing within 30 days following receipt of this permit, identifying the specific issues to be contested. This hearing request must be in the form of a written petition, conforming to NCGS (North Carolina General Statutes) 150B-23, and filed with both the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, North Carolina 27699-6714 and the Division of Air Quality, Permitting Section, 1641 Mail Service Center, Raleigh, North Carolina 27699-1641. The form for requesting a formal adjudicatory hearing may be obtained upon request from the Office of Administrative Hearings. Please note that this permit will be stayed in its entirety upon receipt of the request for a hearing. Unless a request for a hearing is made pursuant to NCGS 150B-23, this Air Quality Permit shall be final and binding 30 days after issuance.

You may request modification of your Air Quality Permit through informal means pursuant to NCGS 150B-22. This request must be submitted in writing to the Director and must identify the specific provisions or issues for which the modification is sought. Please note that this Air Quality Permit will become final and

binding regardless of a request for informal modification unless a request for a hearing is also made under NCGS 150B-23.

The construction of new air pollution emission source(s) and associated air pollution control device(s), or modifications to the emission source(s) and air pollution control device(s) described in this permit must be covered under an Air Quality Permit issued by the Division of Air Quality prior to construction unless the Permittee has fulfilled the requirements of NCGS 143-215.108A(b) and received written approval from the Director of the Division of Air Quality to commence construction. Failure to receive an Air Quality Permit or written approval prior to commencing construction is a violation of NCGS 143-215.108A and may subject the Permittee to civil or criminal penalties as described in NCGS 143-215.114A and 143-215.114B.

Randolph County has not triggered increment tracking under PSD for any pollutants, so no tracking is required.

This Air Quality Permit shall be effective from XXXX YY, 2017 until XXXX YY, 2022, is nontransferable to future owners and operators, and shall be subject to the conditions and limitations as specified therein. Should you have any questions concerning this matter, please contact Heather Sands, at (919) 707-8725 or heather.sands@ncdenr.gov.

Sincerely yours,

William D. Willets, P.E., Chief, Permitting Section
Division of Air Quality, NCDENR

Enclosure

cc: Heather Ceron, EPA Region 4 (electronic copy of permit and permit review)
Winston-Salem Regional Office
Connie Horne (cover letter only)
Central Files

ATTACHMENT to Permit No. 08157T12

Insignificant Activities per 15A NCAC 02Q .0503(8)

Emission Source ID No.	Emission Source Description
Raw Material Storage Section	
I-1107-T01	Monoethylene Glycol (MEG) Storage Tank (158,500 gallons capacity, EP88)
I-1107-T02	MEG Storage Tank (79,000 gallons capacity, EP2)
I-1107-T03	Spent ethylene glycol (SEG) Hold-Up Tank (9,500 gallons capacity, EP61)
I-1115-V01	Diethylene Glycol (DEG) Storage Tank (3,500 gallons capacity, EP3)
I-1115-V02	DEG Storage Tank (6,000 gallons capacity, EP4)
I-1199-T01	MEG Storage Tank (46,000 gallons capacity, EP34)
I-1574-V01	DEG Feed Tank (EP5)
I-KD06-B-11W01	IPA Weigh Feeder (EP85)
Raw Materials Preparation Section (CP1)	
I-1321-V01	Toner Preparation Tank (EP6)
I-1321-V02	Toner Feed Tank (EP6)
I-1322-V01	RH-1 Preparation Tank (EP7)
I-1322-V02	RH-1 Feed tank (EP7)
I-1333-V01	Additive Preparation Tank (Process Vessel) (EP8)
I-1333-V02	Additive Feed Vessel (EP8)
I-1303-W01	IPA Weigh Feeder with associated fabric filter, ID No. I-CD-1303-S01 (filter surface area of 0.68 square feet) (EP9)
I-1403-V01	Catalyst Preparation Tank (EP10)
I-1403-V02	Catalyst Feed Vessel (Process Vessel) (EP10)
I-1415-V01	Paste Preparation Tank (EP12)
I-1574-V02	DEG Feed Tank (EP13)
Esterification (CP1)	
I-1427-V02	Blowdown Vessel (EP14)
Glycol Recovery (CP1)	
I-1433-V01	Glycol Immersion Vessel (EP16)
I-1433-V02	Spent Glycol Immersion Vessel (EP16)
I-1463-V01	Glycol Immersion Vessel (EP16)
I-1473-V01	Glycol Immersion Vessel (EP16)
I-1473-V02	Glycol Collection Vessel (EP16)
I-1473-V03	Spent Glycol Collection Vessel (EP11)
I-1473-V04	Spent Glycol Collection Vessel (EP11)
I-1473-V05	Spent Glycol Collection Vessel (EP11)
Raw Materials Preparation Section (CP2)	
I-AB17-B-11V01	P-Additive Preparation Tank (EP72)
I-AB17-B-11V02	P-Additive Feed Vessel (EP73)
I-AB18-B-10V01	Blue Toner Preparation Vessel (EP74)
I-AB18-B-10V02	U1 Additive Preparation Vessel (EP75)
I-AB18-B-10V03	Blue Toner Feed Vessel (EP76)
I-AB18-B-10V04	U1 Additive Feed Vessel (EP77)
I-AB15-B-11V01	Catalyst Preparation Vessel (EP71)
I-AB15-B-11V02	Catalyst Feed Vessel (EP71)
I-AB15-B-11X01	Catalyst Feeding Device (EP70)
I-AB30-B-12V01	PTA Paste Preparation Tank (EP78)
Esterification (CP2)	
I-AB40-B-63V02	Blowdown Vessel (EP79)

Emission Source ID No.	Emission Source Description
PET Production	
I-1493-D01	Granulate Dryer (EP17)
I-1493-D02	Granulate Dryer (EP17)
I-AB85-B-30U01	Pelletizing Dryer (EP80)
I-AB85-B-30U02	Pelletizing Dryer (EP81)
I-AB85-B-30U03	Pelletizing Dryer (EP82)
I-AB85-B-72T01	Intermediate Chip Silo (EP83)
I-1493-T01	Chips Silo (EP18)
I-2901-X01	Feeding Station (EP18)
I-2901-V01	Amorphous Chip Storage Silo with associated fabric filter, ID No. I-CD-2901-S101 (filter surface area of 19.6 square feet) (EP20)
I-2901-V02	Amorphous Chip Storage Silo with associated fabric filter, ID No. I-CD-2901-S102 (filter surface area of 19.6 square feet) (EP21)
I-2901-V03	Amorphous Chip Storage Silo with associated fabric filter, ID No. I-CD-2901-S103 (filter surface area of 19.6 square feet) (EP23)
I-2901-X03	Feeding Station with associated fabric filter, ID No. I-CD-2901-S104 (filter surface area of 19.6 square feet) (EP24)
I-2901-X20A	Feeding Station (EP83)
I-2901-X20B	Feeding Station (EP83)
I-2901-V21	Amorphous Chip Storage Silo with associated fabric filter, ID No. I-CD-2901-S121 (filter surface area of 19.6 square feet) (EP22)
I-2901-V22	Amorphous Chips Storage Silo with associated fabric filter, ID No. I-CD-2901-S122 (filter surface area of 19.6 square feet) (EP31)
I-2901-V23	Amorphous Chip Storage Silo with associated fabric filter, ID No. I-CD-2901-S123 (filter surface area of 19.6 square feet) (EP86)
I-2901-X21	Feeding Stations with associated fabric filter, ID No. I-CD-2901-S122 (filter surface area of 19.6 square feet) (EP36)
Solid Stating Plant (SSP1)	
I-1610-T01	Feed Silo with associated fabric filter, ID No. I-CD-1610-S101 (filter surface area of 19.6 square feet) (EP40)
I-1660-A01	Pellet Cooler with associated cyclone separator, ID No. I-CD-1660-S01 (36 inches in diameter) (EP43)
I-1660-T01	Pellet Surge Bin with associated cyclone separator, ID No. I-CD-1660-S01 (36 inches in diameter) (EP43)
I-2901-X40	Product Discharge Rotary Valve with associated cyclone separator, ID No. I-CD-1660-S01 (36 inches in diameter) (EP43)
I-2901-V41	Product Storage Silo with associated fabric filter, ID No. I-CD-2901-S141 (filter surface area of 19.6 square feet) (EP33)
I-2901-V42	Product Chip Storage Silo with associated fabric filter, ID No. I-CD-2901-S142 (filter surface area of 19.6 square feet) (EP56)
I-2901-V43	Product Chip Storage Silo with associated fabric filter, ID No. I-CD-2901-S143 (filter surface area of 19.6 square feet) (EP57)
I-2901-V44	Product Chip Storage Silo with associated fabric filter, ID No. I-CD-2901-S144 (filter surface area of 19.6 square feet) (EP59)
I-2901-V45	Product Chip Storage Silo with associated fabric filter, ID No. I-CD-2901-S145 (filter surface area of 19.6 square feet) (EP60)
I-2903-V71	Product Storage Silo with associated fabric filter, ID No. I-CD-2903-S171 (filter surface area of 19.6 square feet) (EP67)
I-2903-V72	Product Storage Silo with associated fabric filter, ID No. I-CD-2903-S172 (filter surface area of 19.6 square feet) (EP68)

Emission Source ID No.	Emission Source Description
Solid Stating Plant (SSP2)	
I-1805-T01	Feed Silo with Associated Fabric Filter, ID No. I-CD-1805-S101 (filter surface area of 19.6 square feet) (EP52)
I-1860-A01	Pellet Cooler with associated cyclone separator, ID No. I-CD-1860-S01 (37 inches in diameter) (EP54)
I-1860-T01	Pellet Surge Bin with associated cyclone separator, ID No. I-CD-1860-S01 (37 inches in diameter) (EP54)
I-2901-X60	Rotary Valve with associated cyclone separator, ID No. I-CD-1860-S01 (37 inches in diameter) (EP54)
I-2901-V61	Product Storage Silo (Off-Spec) with associated fabric filter, ID No. I-CD-2901-S161 (filter surface area of 19.6 square feet) (EP32)
I-2901-V62	Product Chip Storage Silo with associated fabric filter, ID No. I-CD-2901-S162 (filter surface area of 19.6 square feet) (EP58)
I-2901-V63	Product Chip Storage Silo with associated fabric filter, ID No. I-CD-2901-S163 (filter surface area of 19.6 square feet) (EP55)
Pellet Handling and Loading	
I-2902-A11	Deduster Cyclone with associated cyclone, ID No. I-CD-2902-S13 (40 inches in diameter) (EP65)
I-2902-A21	Deduster Cyclone with associated cyclone, ID No. I-CD-2902-S23 (40 inches in diameter) (EP66)
I-2902-S11	Loading Station Separator with associated cyclone, ID No. I-CD-2902-S12 (30 inches in diameter) and fabric filter, ID No. I-CD-2902-S111 (filter surface area of 37.6 square feet) (EP62)
I-2902-S21	Loading Station Separator with associated cyclone, ID No. I-CD-2902-S22 (30 inches in diameter) fabric filter, ID No. I-CD-2902-S112 (filter surface area of 39.2 square feet) (EP63)
I-2904-K02	Reprocessing Chips Unloading and Transfer System Vacuum Blower and associated fabric filter, ID No. I-CD-2904-S04 (filter surface area of 56 square feet) (EP69)
I-2904-S01	Reprocessing Chips Unloading and Transfer System Transfer Cyclone and associated fabric filter, ID No. I-CD-2904-S04 (filter surface area of 56 square feet) (EP69)
I-2904-S02	Reprocessing Chips Unloading and Transfer System Vacuum Receiver Filter and associated fabric filter, ID No. I-CD-2904-S04 (filter surface area of 56 square feet) (EP69)
I-1205-T01	Reprocessing Chips Storage Silo with associated fabric filter, ID No. I-CD-1205-S101 (filter surface area of 19.6 square feet) (EP26)
I-AB12-B-11T01	Recycling Chip Storage Silo with associated fabric filter, ID No. I-CD-AB12-B-11S101 (filter surface area of 8.4 square feet) (EP90)
I-1323-S01	Waste Chips Weigh Feeder (EP19)
I-1325-T01	Reprocessing Chips Day Silo with associated fabric filter, ID No. I-CD-1325-S101 (filter surface area of 8.4 square feet) (EP15)
Heat Transfer Media System	
I-3017-V01	HTM Tank with associated air-cooled fin-type vent condenser, ID No. I-CD-3017-E02 (EP27)
I-3017-V04	HTM Drain Vessel with associated air-cooled fin-type vent condenser, ID No. I-CD-3017-E02 (EP27)
I-3057-V01	HTM Liquid Collection Vessel with associated air-cooled fin-type vent condenser, ID No. I-CD-3017-E02 (EP27)
I-3057-V02	HTM Liquid Collection Vessel with associated air-cooled fin-type vent condenser, ID No. I-CD-3017-E02 (EP27)

Emission Source ID No.	Emission Source Description
I-XA40-B-50V01	HTM Drain Vessel with associated air-cooled fin-type vent condenser, ID No. I-CD-3017-E02 (EP27)
I-3087-V01	HTM Vapor Collecting Vessel with associated shell and tube-type water-cooled vent condenser (ID No. I-CD-3087-E01) (EP28)
I-XA40-B-30V01	HTM Vapor Collecting Vessel with associated water-cooled shell and tube-type condenser, ID No. I-CD-XA40-B-30E01 (EP87)
I-F14-HCP1	CP1 HTM Section Fugitives
I-F14-HCP2	CP2 HTM Section Fugitives
Miscellaneous Process Operations	
I-3851-E01	CP1 Cooling Tower (EP35)
I-3851-E02	CP1 Cooling Tower (EP35)
I-3851-E03	CP1 Cooling Tower (EP35)
I-3852-E01	CP2 Cooling Tower (EP91)
I-3852-E02	CP2 Cooling Tower (EP91)
I-3852-E03	CP2 Cooling Tower (EP91)
I-3852-E04	CP2 Cooling Tower (EP91)
I-3900-B01	Boiler No. 1: Natural gas-fired with 1.675 million Btu per hour heat input capacity (EP29)
I-3900-B02	Boiler No. 2: Natural gas-fired with 1.675 million Btu per hour heat input capacity (EP29)
I-5000-V01	Part Cleaner (EP37)
I-5000-V02	Diesel Fuel Storage Tank (250-gallon capacity) (EP38)

1. Because an activity is insignificant does not mean that the activity is exempted from an applicable requirement or that the Permittee is exempted from demonstrating compliance with any applicable requirement.
2. When applicable, emissions from stationary source activities identified above shall be included in determining compliance with the permit requirements for toxic air pollutants under 15A NCAC 02D .1100 “Control of Toxic Air Pollutants” or 02Q .0711 “Emission Rates Requiring a Permit”.
3. For additional information regarding the applicability of MACT or GACT see the DAQ page titled “The Regulatory Guide for Insignificant Activities/Permits Exempt Activities”. The link to this site is as follows: http://daq.state.nc.us/permits/insig/

Summary of Changes to Permit

The following changes were made to the StarPet – Asheboro, NC, Air Permit No. 08157R11:

Pages	Section	Description of Changes
Cover and throughout	All	Updated all dates and permit revision numbers. Converted permit format from a State permit to a Title V permit.
N/A	N/A	Removed the Synthetic Minor permit stipulation and associated operation restrictions, recordkeeping requirements, and reporting requirements.
N/A	N/A	Removed 15A NCAC 02D .0540, as this permit condition is found in Section MM of the General Conditions.
N/A	N/A	Removed 15A NCAC 02Q .0711 Toxic Air Pollutant Emissions Limitation Requirement to be consistent with current permit language, this condition is not included unless Toxics permitting is triggered.
Attachment	Insignificant Activities	- The Feeding Station (ID No. I-2901-X01) was listed in the permit R11 as having a fabric filter. In email dated August 31, 2016, the Permittee confirmed that this emission source is not equipped with a fabric filter. - IPA Weigh Feeder (ID No. I-1303-W01) was listed in the permit R11 as not being equipped with a fabric filter. Forms indicate that there is a fabric filter associated with this emission source and it was added to the insignificant activity list. - Updated fabric filter and cyclone specifications in table to be consistent with information provided by StarPet. - Removed the Deduster (ID No. I-2902-S13). This is actually the control device for the Deduster (ID No. I-2902-A11, EP65). - Removed the Deduster (ID No. I-2902-S23). This is actually the control device for the Deduster (ID No. I-2902-A21, EP66).
Attachment	Insignificant Activities	Moved MEG, DEG, SEG Storage tanks (ID Nos. I-1107-T01, I-1107-T02, I-1107-T03, I-1115-V01, I-1115-V02, I-1199-T01, I-1574-V01, I-1574-V02) to insignificant activities list.
Attachment	Insignificant Activities	Moved SSP1 Pellet Cooler, Pellet Surge Bin, and Product Discharge Rotary Valve (ID Nos. I-1660-A01, I-1660-T01, I-2901-X40) to insignificant activities list.
Attachment	Insignificant Activities	Removed Bagging Station Separator and Loading Station (ID Nos. I-2902-S03 and I-2902-S04) from table. According to email received February 21, 2017, this source has been taken offline and removed. [NOTE: the source I-2092-S04 was initially in the insignificant activities as an emission source, but was actually the control device for the Bagging Station Separator.]
Attachment	Insignificant Activities	Added fabric filter as an additional control device on Loading Station Separators (ID Nos. I-2902-S11 and I-2902-S21). According to email received February 21, 2017, StarPet added the fabric filters for additional control.
N/A	N/A	Added new units associated with CP2 EP84: Stripper Still (ID No. AH20-B-10V01), Scraper Condensers (ID Nos. AB50-B-30E01 and AB60-B-50E01), Spent Ethylene Glycol Collection Vessel (ID Nos. AB40-B-41V01, AB60-B-63V02), Glycol Immersion Vessels (ID Nos. AB50-B-60V01, AB60-B-50V01, and AB60-B-63V01), and Glycol Evaporator (ID No. AB60-B-63E03)
N/A	N/A	Added new units associated with CP1 EP1: Scraper Condensers (ID Nos. ES-1463-E01 and ES-1433-E01), Glycol Evaporator (ID No. ES-1473-E03)
N/A	N/A	Changed SSP1 equipment names from polycondensation reactors to preheater and solid state polycondensation reactor (ES-1630-R01 and ES-1640-R01, respectively).
N/A	N/A	Removed 15A NCAC 02D .0958: Work Practices for Sources of Volatile Organic Compounds – regulation no longer applies statewide.

State of North Carolina
Department of Environmental Quality
Division of Air Quality

AIR QUALITY PERMIT

Permit No.	Replaces Permit No.	Effective Date	Expiration Date
08157T12	08157R11	XXXX YY, 2017	XXXX YY, 2021

Until such time as this permit expires or is modified or revoked, the below named Permittee is permitted to construct and operate the emission source(s) and associated air pollution control device(s) specified herein, in accordance with the terms, conditions, and limitations within this permit. This permit is issued under the provisions of Article 21B of Chapter 143, General Statutes of North Carolina as amended, and Title 15A North Carolina Administrative Codes (15A NCAC), Subchapters 02D and 02Q, and other applicable Laws.

Pursuant to Title 15A NCAC, Subchapter 02Q, the Permittee shall not construct, operate, or modify any emission source(s) or air pollution control device(s) without having first submitted a complete Air Quality Permit Application to the permitting authority and received an Air Quality Permit, except as provided in this permit.

Permittee:	**StarPet, Inc.**
Facility ID:	**7600276**
Facility Site Location:	**801 Pineview Road**
City, County, State, Zip:	**Asheboro, Randolph County, North Carolina, 27203**
Mailing Address:	**801 Pineview Road**
City, State, Zip:	**Asheboro, Randolph County, North Carolina, 27203**
Application Number:	**7600276.14A**
Complete Application Date:	**December 6, 2013**
Primary SIC Code:	**2821**
Division of Air Quality, Regional Office Address:	**450 West Hanes Mill Road, Suite 300 Winston-Salem, NC 27105**

Permit issued this the YYth day of XXXX, 2017

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William D. Willets, P.E., Chief, Permitting Section
By Authority of the Environmental Management Commission

Table of Contents

SECTION 1 - PERMITTED EMISSION SOURCE(S) AND ASSOCIATED AIR POLLUTION CONTROL DEVICE(S) AND APPURTENANCES

The following table contains a summary of all permitted emission sources and associated air pollution control devices and appurtenances:

Page No.	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
Natural Gas-Fired Heat Transfer Media (HTM) Heaters				
	ES-3017-F01 **(NSPS Subpart Dc)**	HTM Heater No. 1: Natural gas-fired process heater (32 million Btu per hour maximum firing rate) (EP25)	N/A	N/A
	ES-3017-F02 **(NSPS Subpart Dc)**	HTM Heater No. 2: Natural gas-fired process heater (32 million Btu per hour maximum firing rate) (EP25)	N/A	N/A
	ES-3017-F03 **(NSPS Subpart Dc)**	HTM Heater No. 3: Natural gas-fired process heater (53 million Btu per hour maximum firing rate) (EP25)	N/A	N/A
Continuous Polycondensation Plant 1 (CP1) - 330 tons per day production (NSPS Subpart DDD, MACT Subpart VVVVVV)				
	ES-1427-R01	Esterification Reactor No. 1 (EP1)	CD-AH20-B-10U01 OR CD-3420-U01	Natural gas-fired regenerative thermal oxidizer (1.44 million Btu per hour maximum heat input rate) OR Natural gas-fired thermal oxidizer (3.6 million Btu per hour maximum heat input rate)
	ES-1423-R02	Esterification Reactor No. 2 (EP1)		
	ES-1427-C01	Process Column (EP1)		
	ES-1427-E02	Vapor Condenser (EP1)		
	ES-1427-V01	Reflux Vessel (EP1)		
	ES-1427-C02	Stripper column (EP1)		
	ES-1463-R01	Disc Ring Reactor (EP1)		
	ES-1433-R01	Prepolymerization Reactor (EP1)		
	ES-1473-J01	Ethylene Glycol Vapor Jet Condenser (EP1)		
	ES-1473-K01 ES-1473-K02	Vacuum Pump System (EP1)		
	ES-1433-E01	Scraper Condenser (EP1)		
	ES-1463-E01	Scraper Condenser (EP1)		
	ES-1473-E03	Glycol Evaporator (EP1)		
Continuous Polycondensation Plant 2 (CP2) - 550 tons per day production (NSPS Subpart DDD, MACT Subpart VVVVVV)				
	AB40-B-13R01	Esterification Reactor No. 1 (EP84)	CD-AH20-B-10U01 OR	Natural gas-fired regenerative thermal oxidizer (1.44 million Btu per hour maximum heat input rate) OR
	AB40-B-21R01	Esterification Reactor No. 2 (EP84)		
	AB40-B-41C01	Process Column (EP84)		
	AB40-B-63E01	Condenser (EP84)		
	AB40-B-63V01	Reflux Vessel (EP84)		

Page No.	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
	AH20-B-10C01	Stripper Column (EP84)	CD-3420-U01	Natural gas-fired thermal oxidizer (3.6 million Btu per hour maximum heat input rate)
	AB60-B-63K02	Primary Vacuum Pump (EP84)		
	AB60-B-63K03	Backup Vacuum Pump (EP84)		
	AB60-B-63K01	Ethylene Glycol Vapor Jet Ejector (EP84)		
	AB50-B-30R01	Polymerization Reactor No. 1 (EP84)		
	AB60-B-15R01	Polymerization Reactor No. 2 (EP84)		
	AB50-B-30E01	Scraper Condenser (EP84)		
	AB60-B-50E01	Scraper Condenser (EP84)		
	AB40-B-41V01	Spent Ethylene Glycol Collection Vessel (EP84)		
	AB50-B-60V01	Glycol Immersion Vessel (EP84)		
	AB60-B-50V01	Glycol Immersion Vessel (EP84)		
	AB60-B-63V01	Glycol Immersion Vessel (EP84)		
	AB60-B-63V02	Spent Ethylene Glycol Collection Vessel (EP84)		
	AH20-B-10V01	Stripper Still (EP84)		
	AB60-B-63E03	Glycol Evaporator (EP84)		
Solid Stating Plant 1 (SSP1) - 550 tons per day throughput capacity				
	ES-1610-A01	Crystallizer (EP42)	CD-1610-S04	Cyclone Separator (110-inch diameter)
	ES-1630-R01	Preheater *	N/A	N/A
	ES-1640-R01	Solid State Polycondensation Reactor *	N/A	N/A
Solid Stating Plant 2 (SSP2) - 330 tons per day throughput capacity				
	ES-1805-A01	Precrystallizer (EP53)	CD-1805-S01	Cyclone (47 inches in diameter)
	ES-1810-T01	Feed Silo (EP53)		
	ES-1830-R01	Preheater*	N/A	N/A
	ES-1840-R01	Solid State Polycondensation Reactor*	N/A	N/A
	ES-1840-R02	Solid State Polycondensation Reactor*	N/A	N/A
Fugitive Emissions				
	F11-P-CP1&CP2	Raw Material Handling and Storage Area**	N/A	N/A
	F13-P-CP1	CP1 Additive Preparation Section**	N/A	N/A
	F14-P-CP1	CP1 Process Section**	N/A	N/A
	F13-P-CP2	CP2 Additive Preparation Section**	N/A	N/A
	F14-P-CP2	CP2 Process Section**	N/A	N/A

*This emission source is fully enclosed and does not emit directly to the atmosphere.
** Sources with no applicable requirements that emit greater than *de minimis* for classification as Insignificant Activities per 15A NCAC 02Q .0503(8).

SECTION 2 - SPECIFIC LIMITATIONS AND CONDITIONS

2.1 Emission Source(s) and Control Devices(s) Specific Limitations and Conditions

The emission source(s) and associated air pollution control device(s) and appurtenances listed below are subject to the following specific terms, conditions, and limitations, including the testing, monitoring, recordkeeping, and reporting requirements as specified herein:

A. Natural gas-fired Heat Transfer Media (HTM) Heaters:
HTM Heater No. 1 (ID No. ES-3017-F01)
HTM Heater No. 2 (ID No. ES-3017-F02)
HTM Heater No. 3 (ID No. ES-3017-F03)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	0.315 pounds per million Btu heat input	15A NCAC 02D .0503
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Visible emissions	20 percent opacity	15A NCAC 02D .0521
N/A	Recordkeeping/Reporting only	15A NCAC 02D .0524 *(40 CFR Part 60, Subpart Dc)*
Hazardous air pollutants	**MACT Avoidance Condition** See Section 2.2 A.1	15A NCAC 02Q .0317 *(Avoidance of 15A NCAC 02D .1111)*

1. 15A NCAC 02D .0503: PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS

a. Emissions from the combustion of natural gas that are discharged from HTM Heaters Nos. 1 through 3 **(ID Nos. ES-3017-F01, ES-3017-F02 ES-3017-F03)** into the atmosphere shall not exceed 0.315 pounds per million Btu heat input.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance General Condition JJ. If the results of this test are above the limit given in Section 2.1 A.1.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0503.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for particulate emissions from the firing of natural gas in HTM Heaters Nos. 1 through 3.

2. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from HTM Heaters Nos. 1 through 3 **(ID Nos. ES-3017-F01, ES-3017-F02 ES-3017-F03)** shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 A.2.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from firing natural gas for HTM Heaters Nos. 1 through 3.

3. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from HTM Heaters Nos. 1 through 3 **(ID Nos. ES-3017-F01, ES-3017-F02, ES-3017-F03)** shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 A.3.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for visible emissions from the firing of natural gas in HTM Heaters Nos. 1 through 3.

4. 15A NCAC 02D .0524: NSPS 40 CFR PART 60, SUBPART Dc

a. The Permittee shall comply with all applicable provisions, including the notification, testing, reporting, recordkeeping, and monitoring requirements in Environmental Management Commission Standard 15A NCAC 02D .0524 "New Source Performance Standards (NSPS)" as promulgated in 40 CFR Part 60, Subpart Dc, including Subpart A "General Provisions."

Recordkeeping [15A NCAC 02Q .0508(f)]

b. In addition to any other recordkeeping required by 40 CFR 60.48c or recordkeeping requirements of the EPA, the Permittee shall record and maintain records of the amounts of fuel fired during each calendar month. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if these records are not maintained. [40 CFR 60.48c(g)(2)]

Reporting [15A NCAC 02Q .0508(f)]

c. In addition to any other reporting required by 40 CFR 60.48c or notification requirements to the EPA, the Permittee is required to submit a summary report, acceptable to the Regional Air Quality Supervisor, of the amounts of fuel fired during each month, postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

B. Continuous Polycondensation Plants 1 and 2 (CP1 and CP2) – esterification process and polymerization process controlled by a natural gas-fired regenerative thermal oxidizer (ID No. CD-AH20-B-10U01) OR natural gas-fired thermal oxidizer (ID No. CD-3420-U01)

CP1 Esterification Process

- **Stripper column (ID No. ES-1427-C02) – The following process units are enclosed sources of emissions and vapors from these sources are routed through the stripper column:**
  - **Esterification Reactors Nos. 1 and 2 (ID Nos. ES-1427-R01 and ES-1423-R02)***
  - **Process Column (ID No. ES-1427-C01)***

  **NOTE: Emissions from these sources are accounted for in total Stripper Column emissions.*
- **Reflux Vessel (ID No. ES-1427-V01)**
- **Vapor Condenser (ID No. ES-1427-E02)**

CP1 Polymerization Process

- **Vacuum Pump System (ID Nos. ES-1473-K01 and ES-1473-K02) – The following process units are enclosed sources of emissions and vapors from these sources are routed through the Vacuum Pump System:**
  - **Disc Ring Reactor (ID No. ES-1463-R01)***
  - **Scraper Condenser (ID No. ES-1463-E01)***
  - **Ethylene Glycol Vapor Jet Condenser (ID No. ES-1473-J01)***
  - **Prepolymerization Reactor (ID No. ES-1433-R01)***
  - **Scraper Condenser (ID No. ES-1433-E01)***
  - **Glycol Evaporator (ID No. ES-1473-E03)***

  **NOTE: Emissions from these sources are accounted for in total Vacuum Pump System emissions.*

CP2 Esterification Process

- **Stripper Column (ID No. AH20-B-10C01) – The following process units are enclosed sources of emissions and vapors from these sources are routed through the Stripper Column:**
  - **Esterification Reactors Nos. 1 and 2 (ID Nos. AB40-B-13R01 and AB40-B-21R01)***
  - **Process Column (ID No. AB40-B-41C01)***
  - **Condenser (ID No. AB40-B-63E01)***
  - **Reflux Vessel (ID No. AB40-B-63V01)***

  **NOTE: Emissions from these sources are accounted for in total Stripper Column emissions.*

CP2 Polymerization Process

- **The following process units are enclosed sources of emissions and vapors from these sources are also routed through the Stripper Column (ID No. AH20-B-10C01):**
  - **Primary Vacuum Pump (ID No. AB60-B-63K02)***
  - **Backup Vacuum Pump (ID No. AB60-B-63K03)***
  - **Ethylene Glycol Vapor Jet Ejector (ID No. AB60-B-63K01)***
  - **Polymerization Reactors Nos. 1 and 2 (ID Nos. AB50-B-30R01 and AB60-B-15R01)***
  - **Scraper Condensers (ID Nos. AB50-B-30E01 and AB60-B-50E01)***
  - **Spent Ethylene Glycol Collection Vessel (ID No. AB40-B-41V01)***
  - **Glycol Immersion Vessels (ID No. AB50-B-60V01, AB60-B-50V01, and AB60-B-63V01)***

  **NOTE: Emissions from these sources are accounted for in total Stripper Column emissions.*

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Total organic compounds	**Affected Sources: CP1** 0.12 pounds per ton of polyethylene terephthalate product **Affected Sources: CP2** 0.12 pounds per ton of polyethylene terephthalate product	15A NCAC 02D .0524 *(40 CFR 60, Subpart DDD)*
Hazardous air pollutants	**MACT Avoidance Condition** See Section 2.2 A.1	15A NCAC 02Q .0317 *(Avoidance of 15A NCAC 02D .1111)*
Odor	**State-Enforceable Only** See Section 2.2 A.2	15A NCAC 02D .1806
Hazardous air pollutants	See Section 2.2 B.1	15A NCAC 02D .1111 *(40 CFR Part 63, Subpart VVVVVV)*

1. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS (40 CFR PART 60, SUBPART DDD)

a. The Permittee shall comply with all applicable provisions, including the notification, testing, recordkeeping, and monitoring requirements in accordance with 15A NCAC 02D .0524, "New Source Performance Standards (NSPS)" as promulgated in 40 CFR Part 60, Subpart DDD "Standards of Performance for Volatile Organic Compound Emissions from the Polymer Manufacturing Industry" and Subpart A "General Provisions."

Emission Standards [15A NCAC 02D .0524]

b. The Permittee shall limit continuous total organic compound (TOC) emissions as follows [40 CFR 60.562-1(c)(2)]:
   i. CP1 Esterification and Polymerization Processes, as described above, to no greater than 0.12 pounds TOC per ton of polyethylene terephthalate product.
   ii. CP2 Esterification and Polymerization Processes, as described above, to no greater than 0.12 pounds TOC per ton of polyethylene terephthalate product.

Operating Standards [15A NCAC 02D .0524]

c. The Permittee shall operate closed vent systems and control devices at all times when emissions may be vented to them. [40 CFR 60.562-1(d)]

Testing [15A NCAC 02Q .0508(f) and 02D .0524]

d. Under the provisions of NCGS 143-215.108, the Permittee shall demonstrate compliance with the emission limit(s) above by testing the Thermal Oxidizers **(ID Nos. CD-AH20-B-10U01 and CD-3420-U01)** in accordance with a testing protocol approved by the DAQ. Details of the emissions testing and reporting requirements can be found in General Condition JJ. If the results of this or any test are above the limit given in Section 2.1 B.1.b, above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

e. After the initial performance test is conducted, whenever changes are made in production capacity, feedstock type, or whenever there is a replacement, removal, or addition of a control device, the Permittee shall conduct a performance test according to the following procedures in order to determine compliance with the emission limits in Section 2.1 B.1.b, above. At a minimum, a performance test shall be conducted at least once every five years [40 CFR 60.564(a)(1) and (h)]:

i. The emission rate of TOC shall be computed using the following equation:

$$ER_{TOC} = K_5 \frac{E_{TOC}}{P_P}$$

Where:

ER_{TOC} = Emission rate of total organic compounds (minus methane and ethane), lb TOC/ton product;

E_{TOC} = Emission rate of total organic compounds (minus methane and ethane) in the sample, lb/hr;

P_p = The rate of polymer production, lb/hr; and

K_5 = 2,000 lb/ton

ii. The emission rate of total organic compounds, E_{TOC}, shall be determined using the following equation and the test methods and procedures in 40 CFR 60.564(c), measured at the outlet of the thermal oxidizers:

$$E_{TOC} = K_1\left(\sum_{j=1}^{n} C_{Oj} M_{Oj}\right) Q_O$$

Where:

C_{Oj} = Concentration of sample component "j" of the gas stream at the outlet of the thermal oxidizer, dry basis, ppmv;

M_{Oj} = Molecular weight of sample component "j" of the gas stream at the outlet of the thermal oxidizer, lb/lb-mole;

Q_O = Flow rate of the gas stream at the outlet of the thermal oxidizer, dscf/hr; and

K_1 = 5.711×10^{-15} [(lb)/(lb-mole)] / (lb)(ppm)(dscf)]

iii. The rate of polymer production, P_p, shall be determined by dividing the weight of polymer pulled (in pounds) from the process line during the performance test by the number of hours taken to perform the performance test. The weight of polymer pulled shall be determined by direct measurement or, subject to prior approval by DAQ, computed from materials balance by good engineering practice.

iv. The Permittee shall determine the average firebox temperature of the thermal oxidizers by taking temperature measurements at least once every 15 minutes and averaged over the performance test period.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if the performance test is not conducted as required above.

Monitoring [15A NCAC 02Q .0508(f) and 02D .0524]

f. The Permittee shall monitor the thermal oxidizers **(ID Nos. CD-AH20-B-10U01 and CD-3420-U01)** to ensure that they are operated and maintained in conformance with their designs. The Permittee shall install, calibrate, maintain, and operate temperature monitoring devices on the thermal oxidizers **(ID Nos. CD-AH20-B-10U01 and CD-3420-U01)** as follows: [40 CFR 60.563(c)]

i. The temperature monitors shall record continuously the operating temperature to within 1 percent (relative to degrees Celsius) or $\pm$ 0.5^{O}C ($\pm$ 0.9^{O}F), whichever is greater. [40 CFR 60.563(a)(1)]

ii. The temperature monitoring devices shall be installed in the firebox of the thermal oxidizers. [40 CFR 60.563(b)(1)(i)]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if the thermal oxidizer operating temperature is not monitored as required above.

g. If the vent system that contains valves that could divert a vent stream in CP1 or CP2 (as described above) from the thermal oxidizers is used to comply with Section 2.1 B.1, the Permittee shall do one or a combination of the following:

i. Install a flow indicator immediately downstream of each valve that if opened would allow a vent stream to bypass the control device and be emitted, either directly or indirectly, to the atmosphere. The flow indicator shall be capable of recording flow at least once every fifteen minutes.

ii. Monitor the valves once a month, checking the position of the valves and the condition of the car seal, and identify all times when the car seals have been broken and the valve position has been changed

(i.e., from opened to closed for valves in the vent piping to the control device and from closed to open for valves that allow the stream to be vented directly or indirectly to the atmosphere).

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if the vent system is equipped with valves that could divert vent streams from the control device and the system is not monitored as required above.

Recordkeeping

h. The Permittee shall keep up-to-date, readily accessible records of the following information measured during each performance test, and shall include the following information in the report of the initial performance test in addition to the written results of the performance tests.
   i. The Thermal Oxidizer **(ID Nos. CD-AH20-B-10U01 and CD-3420-U01)** firebox temperature measurements and average collected during the performance test as specified in Section 2.1 B.1.e, above [40 CFR 60.565(a)(1)(i) and (c)(1)]
   ii. The emission rate calculated according to Section 2.1 B.1.e, above. [40 CFR 60.565(a)(1)(ii)]

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if the temperature and emission rate records are not kept as required above.

i. The Permittee shall keep for at least two years, up-to-date, readily accessible continuous records of the following:
   i. For vent systems containing valves that could divert emission streams away from the Thermal Oxidizers **(ID Nos. CD-AH20-B-10U01 and CD-3420-U01)**: [40 CFR 60.565(b)(2)]
      (A) All periods when flow is indicated if flow indicators are installed as specified in Section 2.1 B.1.g.i, above;
      (B) All times when maintenance is performed on car-sealed valves, when the car seal is broken, and when the valve position is changed (i.e., from open to closed for valves in the vent piping to the control device and from closed to open for valves that vent the stream directly or indirectly to the atmosphere bypassing the control device).
   ii. The temperature measurements specified in Section 2.1 B.1.e, above. [40 CFR 60.565(c)(1)]
   iii. Records of all 3-hour periods of operation during which the average combustion temperature was more than 50°F below the average combustion temperature during the most recent performance test at which compliance was demonstrated. [40 CFR 60.565(c)(2)(i)]

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if records are not retained as required above.

j. The Permittee shall maintain up-to-date, readily accessible continuous records of the following: [40 CFR 60.565(g)]
   i. Any changes in production capacity, feedstock type, or catalyst type, or of any replacement, removal or addition of product recovery equipment; and
   ii. The results of any performance test performed pursuant to the procedures specified by Section 2.1 B.1.e, above.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if records are not retained as required above.

Reporting [15A NCAC 02Q .0508(f)]

k. In addition to any other reporting required by 40 CFR 60.565 or notification requirements to the EPA, the Permittee is required to submit a summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities, postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

C. Solid Stating Plant 1 (SSP1)

- **Crystallizer (ID No. ES-1610-A01) controlled by cyclone separator (ID No. CD-1610-S04)**
- **Preheater (ID No. ES-1630-R01)***
- **Solid State Polycondensation Reactor (ID No. ES-1640-R01)***

NOTE: The entire system is closed and these sources are not ducted directly to the atmosphere. Emissions from the entire system are accounted for in total Crystallizer emissions.

Solid Stating Plant 2 (SSP2)

- **Precrystallizer (ID No. ES-1805-A01) and Feed Silo (ID No. ES-1810-T10) controlled by a cyclone (ID No. CD-1805-S01)**
- **Preheater (ID No. ES-1830-R01) and Solid State Polycondensation Reactors (ID Nos. ES-1840-R01 and ES-1840-R02)***

NOTE: The entire system is closed and these sources are not ducted directly to the atmosphere. Emissions from the entire system are accounted for in total Precrystallizer emissions.

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	For process rates > 30 tons per hour $E = 55.0 \times P^{0.11} - 40$ Where: E = allowable emission rate in pounds per hour P = process weight in tons per hour	15A NCAC 02D .0515
Visible emissions	20 percent opacity	15A NCAC 02D .0521
Odor	**State-Enforceable Only** See Section 2.2 A.2	15A NCAC 02D .1806

1. 15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

a. Emissions of particulate matter from SSP1 and SSP2, as described above, shall not exceed an allowable emission rate as calculated by the following equation:

$E = 55.0 \times P^{0.11} - 40$ (for process rates greater than 30 tons per hour)
Where: E = allowable emission rate in pounds per hour, and
P = process weight in tons per hour

Testing [15A NCAC 02Q .0508(f)]

b. If an emission testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 C.1.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

Monitoring [15A NCAC 02Q .0508(f)]

c. Particulate matter emissions from the SSP1 and SSP2, as described above, shall be controlled by the associated cyclones **(ID Nos. CD-1610-S04 and CD-1805-S01, respectively)**. To assure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there is no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
   i. an annual (for each 12-month period from initial inspection) inspection of the cyclone system integrity; and
   ii. a monthly external visual inspection of the system ductwork, and material collection unit for leaks.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the cyclone and ductwork are not inspected and maintained.

Recordkeeping [15 NCAC 02Q .0508(f)]

d. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each inspection;
   iii. the results of any maintenance performed on any control device; and
   iv. any variance from manufacturer's recommendations, if any, and corrections made.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit the results of any maintenance performed on any control device within 30 days of a written request by the DAQ.

f. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from SSP1 and SSP2, as described above, shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 C.2.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521

Monitoring [15A NCAC 02Q .0508(f)]

c. To ensure compliance, once a month the Permittee shall observe the emission points of SSP1 and SSP2, as described above, for any visible emissions above normal. The monthly observation must be made for each month of the calendar year period to ensure compliance with this requirement. The Permittee shall establish "normal" for these sources in the first 30 days following the effective date of the permit. If visible emissions from SSP1 and SSP2, as described above, are observed to be above normal, the Permittee shall either:
   i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
   ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 C.2.a, above.

   If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

Recordkeeping [15A NCAC 02Q .0508(f)]

d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
   iii. the results of any corrective actions performed.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2.2 Multiple Emission Source(s) Specific Limitations and Conditions

A. Facility-wide

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Hazardous air pollutants	**MACT Avoidance Condition** Facility-wide HAP emissions shall be less than: 10 tpy of any individual HAP; and 25 tpy of total combined HAP.	15A NCAC 02Q .0317 *(Avoidance of 15A NCAC 02D .1111)*
Odor	**State-Enforceable Only** Prevention of objectionable odors beyond the facility's boundaries.	15A NCAC 02D .1806

1. 15A NCAC 02Q .0317: Avoidance Conditions
for 15A NCAC 02D .1111: Maximum Achievable Control Technology

a. In order to remain classified a minor source of hazardous air pollutants and avoid applicability of major source MACT standards, including "National Emission Standards for Hazardous Air Pollutant Emissions: Group IV Polymers and Resins," 40 CFR Part 63, Subpart JJJ, and "National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters," 40 CFR Part 63, Subpart DDDDD, facility-wide HAP emissions shall be less than the following:
   i. 10 tons per year of each hazardous air pollutant; and
   ii. 25 tons per year of total combined hazardous air pollutants.

Operating Standards/Monitoring [15A NCAC 02Q .0508(f)]

b. As needed to meet the limitations in Section 2.2 A.1.a, above, the following restrictions shall apply:
   i. The amount of material processed through the Continuous Polycondensate Plant 1 (CP1, as described in Section 1) shall not exceed 330 tons per day.
   ii. The amount of material processed through the Continuous Polycondensate Plant 2 (CP2, as described in Section 1) shall not exceed 550 tons per day.
   iii. Hazardous air pollutant emissions from the Continuous Polycondensate Plants 1 and 2 (CP1 and CP2, as described in Section 1) shall be controlled by the regenerative thermal oxidizer **(ID No. CD-AH20-B-10U01)** or the thermal oxidizer **(ID No. CD-3420-U01)**.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the operational standards above are not met as required above.

c. The Permittee shall perform periodic inspections and maintenance of the thermal oxidizers **(ID Nos. CD-AH20-B-10U01 and CD-3420-U01)** as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there are no manufacturer's inspection and maintenance recommendations, as a minimum, the Permittee shall perform an internal inspection of the firebox and associated inlet/outlet ductwork to ensure structural integrity at each plant turnaround time. The maximum time between inspections shall not exceed three years. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the thermal oxidizers are not inspected and maintained as required.

d. The Permittee shall ensure the proper performance of each thermal oxidizer **(ID Nos. CD-AH20-B-10U01 and CD-3420-U01)** and install, calibrate, maintain and operate a temperature monitoring device in the firebox of each oxidizer to continuously measure and record the operating temperature. The device shall continuously measure and record the temperature to within 1 percent (relative to degrees Celsius). The thermocouple of the temperature sensor shall be installed in the combustion zone at a location in the

firebox. The operating temperature of each oxidizer shall be maintained above the minimum temperature determined according to the procedures in Section 2.2 B.1.u, below. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if each thermal oxidizer temperature is not monitored as required.

Recordkeeping [15A NCAC 02Q .0508(f)]

e. Each month, the Permittee shall calculate facility-wide emissions of each individual HAP and total combined HAP during the previous calendar month and the previous 12-month period. The results of the emissions calculations shall be maintained in a log book (written or electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the HAP emissions are not calculated and recorded or if the individual or total HAP emissions exceeds the limitations in Section 2.2 A.1.a, above.

f. The Permittee shall maintain continuous records of the thermal oxidizer firebox temperature monitoring data as required in Section 2.2 B.1.v, below. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the records of the thermal oxidizer temperature monitoring data are not maintained.

g. The results of inspection and maintenance of the thermal oxidizers **(ID Nos. CD-AH20-B-10U01 and CD-3420-U01)** shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each inspection;
   iii. the results of any maintenance performed on the thermal oxidizers; and
   iv. Any variance from manufacturer's recommendations and, if any, corrections made.

   The Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .1111 if the required records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

h. Within 30 days after each calendar year quarter, regardless of the actual emissions, the Permittee shall submit the facility-wide total HAP emissions and highest individual HAP emissions. The Permittee shall include monthly emissions data and 12-month totals for the previous 14 months. The data must be calculated for each of the three 12-month periods over the previous 14 months.

i. The Permittee shall submit the results of any maintenance performed on the thermal oxidizers **(ID Nos. CD-AH20-B-10U01 and CD-3420-U01)** within 30 days of a written request by the DAQ.

j. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

State-enforceable only

2. 15A NCAC 02D .1806: CONTROL AND PROHIBITION OF ODOROUS EMISSIONS

The Permittee shall not operate the facility without implementing management practices or installing and operating odor control equipment sufficient to prevent odorous emissions from the facility from causing or contributing to objectionable odors beyond the facility's boundary.

B. Two Chemical Manufacturing Process Units (CMPU)

Continuous Polycondensation Plants 1 and 2 (CP1 and CP2) – controlled by a natural gas-fired regenerative thermal oxidizer (ID No. CD-AH20-B-10U01) OR natural gas-fired thermal oxidizer (ID No. CD-3420-U01)

- **Stripper column (ID No. ES-1427-C02) – The following process units are enclosed sources of emissions and vapors from these sources are routed through the Stripper Column:**
  - **Esterification Reactors Nos. 1 and 2 (ID Nos. ES-1427-R01 and ES-1423-R02)**
  - **Process Column (ID No. ES-1427-C01)**
- **Reflux Vessel (ID No. ES-1427-V01)**
- **Vapor Condenser (ID No. ES-1427-E02)**
- **Vacuum Pump System (ID Nos. ES-1473-K01 and ES-1473-K02) – The following process units are enclosed sources of emissions and vapors from these sources are routed through the Vacuum Pump System:**
  - **Disc Ring Reactor (ID No. ES-1463-R01)**
  - **Scraper Condenser (ID No. ES-1463-E01)**
  - **Ethylene Glycol Vapor Jet Condenser (ID No. ES-1473-J01)**
  - **Prepolymerization Reactor (ID No. ES-1433-R01)**
  - **Scraper Condenser (ID No. ES-1433-E01)**
  - **Glycol Evaporator (ID No. ES-1473-E03)**
- **Stripper Column (ID No. AH20-B-10C01) – The following process units are enclosed sources of emissions and vapors from these sources are routed through the Stripper Column:**
  - **Esterification Reactors Nos. 1 and 2 (ID Nos. AB40-B-13R01 and AB40-B-21R01)**
  - **Process Column (ID No. AB40-B-41C01)**
  - **Condenser (ID No. AB40-B-63E01)**
  - **Reflux Vessel (ID No. AB40-B-63V01)**
  - **Primary Vacuum Pump (ID No. AB60-B-63K02)**
  - **Backup Vacuum Pump (ID No. AB60-B-63K03)**
  - **Ethylene Glycol Vapor Jet Ejector (ID No. AB60-B-63K01)**
  - **Polymerization Reactors Nos. 1 and 2 (ID Nos. AB50-B-30R01 and AB60-B-15R01)**
  - **Scraper Condensers (ID Nos. AB50-B-30E01 and AB60-B-50E01)**
  - **Spent Ethylene Glycol Collection Vessel (ID No. AB40-B-41V01)**
  - **Glycol Immersion Vessels (ID No. AB50-B-60V01, AB60-B-50V01, and AB60-B-63V01)**

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Hazardous air pollutants	Reduce emissions of total organic HAP by 95 percent	15A NCAC 02D .1111 *(40 CFR Part 63, Subpart VVVVVV)*

1. 15A NCAC 02D .1111: MAXIMUM ACHEIVABLE CONTROL TECHNOLOGY (40 CFR PART 63, SUBPART VVVVVV)

a. The Permittee shall comply with all applicable provisions, including the notification, testing, recordkeeping, monitoring requirements in accordance with 15A NCAC 02D .1111, "Maximum Achievable Control Technology (MACT)" as promulgated in 40 CFR Part 63, Subpart VVVVVV, "National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources" and Subpart A "General Provisions."

Emissions Limitations [15A NCAC 02D .1111]

b. The Permittee shall reduce emissions of total organic HAP from both CPMUs **(CP1 and CP2, as described above)** by 95 percent or greater by routing emissions through a closed vent system in

accordance with the requirements of Section 2.2 B.1.g, below, to either thermal oxidizer **(ID Nos. CD-AH20-B-10U01 or CD-3420-U01)**. Compliance calculation may be based on either total organic HAP or TOC. [40 CFR 63.11496(b)(1)(i) and 40 CFR Part 63, Subpart VVVVVV, Table 3]

Management Practices [15A NCAC 02D .1111]

c. The Permittee shall equip each process vessel in the CMPUs **(CP1 and CP2, as described above)** with a cover or lid that must be closed at all times when it is in organic HAP service, except for manual operations that require access, such as material addition and removal, inspection, sampling and cleaning. [40 CFR 63.11495(a)(1)] The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the process vessels are not equipped with covers or lids and operated as described above.

d. The Permittee shall conduct inspections of process vessels and equipment for each CMPU **(CP1 and CP2, as described above)** in organic HAP service to demonstrate compliance with Section 2.2 B.1.c and to determine that the process vessels and equipment are sound and free of leaks as follows: [40 CFR 63.11495(a)(3)]
   i. The Permittee shall conduct inspections at least once each quarter.
   ii. The Permittee may use detection methods incorporating sight, sound, or smell for these inspections.
      (A) Indications of a leak identified using sight, sound, or smell shall constitute a leak unless the Permittee demonstrates that the indications of a leak are due to a condition other than loss of HAP.
      (B) The Permittee may use Method 21 with a leak definition of 500 ppmv to determine if indications of a leak identified during an inspection are due to a condition other than loss of HAP.
      (C) If indications of a leak are determined not to be HAP in one quarterly monitoring period, the Permittee shall still perform the inspection and demonstration in the next quarterly monitoring period.
   iii. As an alternative to conducting inspections, the Permittee may use Method 21 of 40 CFR part 60, appendix A-7, with a leak definition of 500 ppmv to detect leaks.
   iv. The Permittee shall conduct inspections while the CMPU **(CP1 and CP2, as described above)** is operating.
   v. An inspection is not required in a calendar quarter during which the CMPU **(CP1 and CP2, as described above)** does not operate for the entire calendar quarter and is not in organic HAP service. If the CMPU operates at all during a calendar quarter, an inspection is required.
   vi. As an alternative to paragraphs (i) through (v), above, the Permittee may conduct inspections while the process vessels and equipment in the CMPU **(CP1 and CP2, as described above)** are in VOC service, provided that leaks can be detected when in VOC service.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the process vessels and equipment in the CMPU are not inspected as required above.

e. The Permittee shall repair any leak within 15 calendar days after detection of the leak, or document the reason for any delay of repair. For the purposes of this condition, a leak will be considered "repaired" if a condition specified in one of the following is met. [40 CFR 63.11495(a)(4)]
   i. The visual, audible, olfactory, or other indications of a leak to the atmosphere have been eliminated, or
   ii. No bubbles are observed at potential leak sites during a leak check using soap solution, or
   iii. The system will hold a test pressure.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if leaks are not repaired as required above.

f. At all times, the Permittee shall operate and maintain each CMPU **(CP1 and CP2, as described above)**, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the

Administrator, which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the CMPU. [40 CFR 63.11495(d)] The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if each CMPU is not operated and maintained as required above.

CLOSED VENT SYSTEMS

Closed Vent System Equipment and Operating Requirements [15A NCAC 02D .1111]

g. The Permittee shall route emissions from each CMPU **(CP1 and CP2, described above)** through a closed vent system to the thermal oxidizers **(ID Nos. CD-AH20-B-10U01 and CD-3420-U01)** according to the following requirements: [40 CFR 63.983(a)]
   i. Each closed vent system shall be designed and operated to collect the organic HAP material vapors from the emission point, and to route the collected vapors to a control device.
   ii. The Permittee shall operate the closed vent systems at all times when emissions are vented to, or collected by, them.
   iii. Except for equipment needed for safety purposes such as pressure relief devices, low leg drains, high point bleeds, analyzer vents, and open-ended valves or lines, the Permittee shall comply with one of the following for each closed vent system that contains bypass lines that could divert a vent stream to the atmosphere.
      (A) The Permittee shall properly install, maintain, and operate a flow indicator that is capable of taking periodic readings. The flow indicator shall be installed at the entrance to any bypass line. Records shall be generated as specified in Section 2.2 B.1.o.ii.A, below.
      (B) Secure the bypass line valve in the non-diverting position with a car-seal or a lock-and-key type configuration. Records shall be generated as specified in Section 2.2 B.1.o.ii.B, below.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if closed vent systems used to route organic HAP emissions to the thermal oxidizers are not operated and maintained as required above.

Closed Vent System Inspection and Monitoring [15A NCAC 02D .1111]

h. Except for any closed vent systems that are designated as unsafe or difficult to inspect as specified in Section 2.2 B.1.i and B.1.j, below, the Permittee shall inspect each closed vent system as follows: [40 CFR 63.983(b)(1)]
   i. If the closed vent system is constructed of hard-piping, the Permittee shall comply with the requirements specified below:
      (A) Conduct an initial inspection according to the procedures in Section 2.2 B.1.l, below; and
      (B) Conduct annual inspections for visible, audible, or olfactory indications of leaks.
   ii. If the closed vent system is constructed of ductwork, the Permittee shall conduct an initial and annual inspection according to the procedures in Section 2.2 B.1.l, below.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the closed vent systems used to route organic HAP emissions to the thermal oxidizers are not inspected as required above.

i. Any parts of the closed vent system that are designated as unsafe to inspect are exempt from the inspection requirements of Section 2.2 B.1.h, above, if the following conditions are met: [40 CFR 63.983(b)(2)]
   i. The Permittee determines that the equipment is unsafe-to-inspect because inspecting personnel would be exposed to an imminent or potential danger as a consequence of complying with Section 2.2 B.1.h, above; and
   ii. The Permittee has a written plan that requires inspection of the equipment as frequently as practical during safe-to-inspect times. Inspection is not required more than once annually.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if an inspection plan for unsafe-to-inspect equipment is not written as required above.

j. Any parts of the closed vent system that are designated as difficult-to-inspect are exempt from the inspection requirements of Section 2.2 B.1.h, above, if the following conditions apply. [40 CFR 63.983(b)(3)]
   i. The Permittee determines that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters (7 feet) above a support surface; and
   ii. The Permittee has a written plan that requires inspection of the equipment at least once every 5 years.
   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if an inspection plan for difficult-to-inspect equipment is not written as required above.

k. For each bypass line, the Permittee shall comply with the following: [40 CFR 63.983(b)(4)]
   i. If a flow indicator is used, a reading shall be taken at least once every 15 minutes.
   ii. If the bypass line valve is secured in the non-diverting position, the Permittee shall visually inspect the seal or closure mechanism at least once every month to verify that the valve is maintained in the non-diverting position, and the vent stream is not diverted through the bypass line.
   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if bypass lines are not monitored or inspected as required above.

l. As required in Section 2.2 B.1.h, above, the Permittee shall inspect each closed vent system in accordance with Method 21 of 40 CFR part 60, appendix A, and the procedures specified in 40 CFR 63.983(c)(1). The instrument probe shall be traversed around all potential leak interfaces as described in Method 21 of 40 CFR part 60, appendix A. Inspections shall be performed when the equipment is in organic HAP service, or in use with any other detectable gas or vapor. [40 CFR 63.983(c)]
   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if closed vent systems are not inspected when necessary and as required above.

m. The Permittee shall comply with the following closed vent system leak repair provisions: [40 CFR 63.983(d)]
   i. If there are visible, audible, or olfactory indications of leaks at the time of the annual visual inspections required by Section 2.2 B.1.h.i.(A), above, the Permittee shall either:
      (A) eliminate the leak; or
      (B) monitor the equipment according to the procedures in Section 2.2 B.1.l, above.
   ii. Leaks, as indicated by an instrument reading greater than 500 parts per million by volume above background or by visual inspections, shall be repaired as soon as practical, except as provided in paragraph (iii), below.
      (A) A first attempt at repair shall be made no later than 5 days after the leak is detected.
      (B) Except as provided in paragraph (iii), below, repairs shall be completed no later than 15 days after the leak is detected or at the beginning of the next introduction of vapors to the system, whichever is later.
   iii. Delay of repair of a closed vent system for which leaks have been detected is allowed if repair within 15 days after a leak is detected is technically infeasible or unsafe without a closed vent system shutdown, as defined in 40 CFR 63.981, or if the Permittee determines that emissions resulting from immediate repair would be greater than the emissions likely to result from delay of repair. Repair of such equipment shall be completed as soon as practical, but not later than the end of the next closed vent system shutdown.
   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if closed vent system leaks are not repaired as required above.

Closed Vent System Recordkeeping [40 CFR 63.11496(b)(1)(i), Table 3 of 40 CFR Part 63, Subpart VVVVVV]

n. For each CMPU **(CP1 and CP2, as described above)**, the Permittee shall keep the following records: [40 CFR 63.11501(c)(1)]

i. The dates and results of each inspection event, the dates of equipment repairs, and, if applicable, the reasons for any delay in repair allowed according to Section 2.2 B.1.m.iii, above. [63.11495(a)(5)]
ii. The date, time, and duration of each malfunction of operation of CMPU process equipment, thermal oxidizers, or continuous temperature monitoring systems used to comply with the emission limits in Section 2.2 B.1.b, above, that causes a failure to meet the standard. The record must include a list of the affected sources or equipment, an estimate of the volume of each regulated pollutant emitted over the standard, and a description of the method used to estimate the emissions.
iii. Records of actions taken during periods of malfunction to minimize emissions in accordance with Section 2.2 B.1.f, above, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if inspection and malfunction records are not retained as required above.

o. For each closed vent system used to collect organic HAP emissions from each CMPU **(CP1 and CP2, as described above)**, the Permittee shall retain the following records: [40 CFR 63.998(d)(1)]
i. The identification of all parts of the closed vent system that are designated as unsafe or difficult to inspect, an explanation of why the equipment is unsafe or difficult to inspect, and the plan for inspecting the equipment required by Section 2.2 B.1.i.ii or B.1.j.ii, above.
ii. If the closed vent system contains a bypass line that could divert the stream away from the thermal oxidizers **(ID Nos. CD-AH20-B-10U01 and CD-3420-U01)** to the atmosphere, the Permittee shall keep records in either paragraph (A) or (B) as follows: [63.998(d)(1)(ii)]
(A) Hourly records of whether the flow indicator specified in Section 2.2 B.1.g.iii.(A), above, was operating and whether a diversion was detected at any time during the hour, as well as records of the times of all periods when the vent stream is diverted from the thermal oxidizers **(ID Nos. CD-AH20-B-10U01 and CD-3420-U01)** or the flow indicator is not operating; or
(B) If a seal mechanism is used to comply with Section 2.2 B.1.g.iii.(B), above, the Permittee shall record that the monthly visual inspection of the seals or closure mechanisms has been conducted, and record the occurrence of all periods when the seal mechanism is broken, the bypass line valve position has changed, or the key for a lock-and-key type lock has been checked out, and records of any car-seal that has been broken. Hourly records of flow are not required.
iii. When a leak is detected, as specified in Section 2.2 B.1.m.ii, above, the following information shall be recorded: [40 CFR 63.998(d)(1)(iii)]
(A) The instrument and the equipment identification number and the operator name, initials, or identification number.
(B) The date the leak was detected and the date of the first attempt to repair the leak.
(C) The date of successful repair of the leak.
(D) The maximum instrument reading measured by the procedures in Section 2.2 B.1.l, above, after the leak is successfully repaired or determined to be nonrepairable.
(E) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 days after discovery of the leak. The Permittee may develop a written procedure that identifies the conditions that justify a delay of repair. In such cases, reasons for delay of repair may be documented by citing the relevant sections of the written procedure.
(F) Copies of the Periodic Reports as specified in Section 2.2 B.1.dd, below, if records are not maintained on a computerized database capable of generating summary reports from the records.
iv. If a leak is not detected, record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected. [40 CFR 63.998(d)(1)(iv)]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if closed vent system records are not retained as required above.

CONTROL DEVICE – INCINERATOR

Incinerator Equipment and Operating Requirements

p. The Permittee shall operate the thermal oxidizers **(ID Nos. CD-AH20-B-10U01 and CD-3420-U01)** as follows: [40 CFR 63.988(a)]
   i. The Permittee shall operate the thermal oxidizers at all times when emissions are vented to them.
   ii. The vent stream from the each CMPU **(CP1 and CP2, as described above)** shall be introduced into the flame zone of the thermal oxidizers.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the thermal oxidizers are not operated as required above.

Incinerator Performance Testing [15A NCAC 02D .1111]

q. The Permittee shall demonstrate compliance with the emission limit in Section 2.2 B.1.b, above, by testing the thermal oxidizers **(ID Nos. CD-AH20-B-10Y01 and CD-3420-U01)** in accordance with a testing protocol approved by the DAQ. Details of the emissions testing and reporting requirements can be found in General Condition JJ. The Permittee shall conduct performance tests according to the requirements in 40 CFR 63.997 and as specified below: [40 CFR 63.988(b)(1)]
   i. The Permittee shall conduct a performance test on the thermal oxidizers **(ID Nos. CD-AH20-B-10Y01 and CD-3420-U01)** according to the following schedule:
      (A) A performance test shall be conducted on the thermal oxidizer **(ID Nos. CD-3420-U01)** no later than December 26, 2016.
      (B) A performance test shall be conducted on the regenerative thermal oxidizer **(ID Nos. CD-AH20-B-10Y01)** no later than 180 days from the effective date of Permit No. 08157T12. A performance test is not required if a prior performance test was conducted using the same methods specified in Section 2.2 B.1.q.ii, B.1.q.iii, and B.1.r, below.
   ii. The Permittee shall conduct performance tests at maximum representative operating conditions for the process, unless DAQ specifies or approves alternate operating conditions. During the performance test, the Permittee may operate the thermal oxidizers at maximum or minimum representative operating conditions for monitored control device parameters, whichever results in lower emission reduction. Operations during periods of start-up, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test. [40 CFR 63.997(e)(1)(i)]
   iii. Each performance test shall consist of three separate runs using the test methods specified in Section 2.2 B.1.r, below. [40 CFR 63.997(e)(1)(v)]
      (A) Each run shall be conducted for at least 1 hour and under the conditions specified above.
      (B) For the purpose of determining compliance with Section 2.2 B.1.b, above, the arithmetic means of results of the three runs shall apply.
      (C) In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the Permittee's control, compliance may, upon the approval from DAQ, be determined using the arithmetic mean of the results of the two other runs.
   iv. If the Permittee elects to use a control device to replace the thermal oxidizers **(ID Nos. CD-AH20-B-10Y01 and CD-3420-U01)**, the Permittee shall notify DAQ, by amendment of the regulated source's title V permit before implementing the change. Upon implementing the change, a compliance demonstration or performance test shall be performed within 180 days. [40 CFR 63.997(c)(3)]

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the performance tests are not conducted as required above.

r. The Permittee shall conduct each performance test using the following procedures. The percent reduction may be measured as either total organic HAP or as TOC minus methane and ethane according to the procedures specified. [40 CFR 63.997(e)(2)]

i. Method 1 or 1A of 40 CFR Part 60, Appendix A, as appropriate, shall be used for selection of the sampling sites. For determination of compliance with the percent reduction requirement of total organic HAP or TOC, sampling sites shall be located at the inlet and outlet of the control device.
ii. The gas volumetric flow rate shall be determined using Method 2, 2A, 2C, 2D, 2F, or 2G of 40 CFR Part 60, Appendix A, as appropriate.
iii. The Permittee shall use Method 18, 25, or 25A of 40 CFR Part 60, Appendix A, as applicable to determine compliance with the percent reduction requirement specified in Section 2.2 B.1.b, above, except as follows:
(A) The method ASTM D6420-99 may be used in lieu of Method 18 of 40 CFR Part 60, Appendix A, under these conditions:
(1) If the target compound(s) is listed in Section 1.1 of ASTM D6420-99 and the target concentration is between 150 parts per billion by volume and 100 parts per million by volume.
(2) If the target compound(s) is not listed in Section 1.1 of ASTM D6420-99 but is potentially detected by mass spectrometry, an additional system continuing calibration check after each run, as detailed in Section 10.5.3 of ASTM D6420-99, must be followed, met, documented, and submitted with the performance test report even if you do not use a moisture condenser or the compound is not considered soluble.
(3) If a minimum of one sample/analysis cycle is completed at least every 15 minutes.
(B) Alternatively, any other method or data that have been validated according to the applicable procedures in Method 301 of 40 CFR Part 63, Appendix A may be used.
iv. The Permittee shall use the procedures specified in 40 CFR 63.997(e)(2)(iv) to calculate percent reduction efficiency.
v. Instead of or in addition to the requirements in the paragraphs above, the Permittee shall meet the following requirements: [40 CFR 63.11495(g)(1) and 40 CFR 63.2450(g)(1) through (g)(4)]
(A) The Permittee shall conduct a gas molecular weight analysis using Method 3, 3A, or 3B of 40 CFR Part 60, Appendix A.
(B) The Permittee shall measure moisture content of the stack gas using Method 4 of 40 CFR Part 60, Appendix A.
(C) As an alternative to using Method 18, Method 25/25A, or Method 26/26A of 40 CFR Part 60, Appendix A, the Permittee may use Method 320 of 40 CFR Part 60, Appendix A. When using Method 320, the Permittee shall follow the analyte spiking procedures of Section 13 or Method 320, unless it is demonstrated that the complete spiking procedure has been conducted at a similar source.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the performance tests are not conducted as required above.

s. For each performance test, the Permittee shall provide performance testing facilities as follows: [40 CFR 63.997(d)]
i. Sampling ports adequate for the test methods specified in Section 2.2 B.1.r, above. This includes, as applicable, the following requirements:
(A) Constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures; and
(B) Providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures;
ii. Safe sampling platform(s);
iii. Safe access to sampling platform(s);
iv. Utilities for sampling and testing equipment; and
v. Any other facilities that the DAQ deems necessary for safe and adequate testing of a source.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if performance testing facilities are not provided as required above.

Incinerator Monitoring Requirements

t. The Permittee shall install a temperature monitoring device on each of the thermal oxidizers **(ID Nos. CD-AH20-B-10U01 and CD-3420-U01)**. The temperature monitoring device shall be capable of providing a continuous record and shall be installed in the fire box of the thermal oxidizer or in the ductwork immediately downstream of the fire box in a position before any substantial heat exchange occurs. [40 CFR 63.988(c)(1)] The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if continuous temperature monitoring systems are installed on the thermal oxidizers as required above.

u. The Permittee shall monitor the thermal oxidizers **(ID Nos. CD-AH20-B-10U01 and CD-3420-U01)** according to the following requirements: [40 CFR 63.996(c)]
   i. The Permittee shall install, calibrate, maintain, and operate the temperature monitoring devices installed on the thermal oxidizers according to manufacturer's specifications or other written procedures that provide adequate assurance that the equipment would reasonably be expected to monitor accurately.
   ii. The Permittee shall maintain and operate each temperature monitoring device installed on the thermal oxidizers in a manner consistent with good air pollution control practices, and as follows:
      (A) The Permittee shall ensure the immediate repair or replacement of temperature monitoring device parts to correct “routine” or otherwise predictable malfunctions. The necessary parts for routine repairs of the affected equipment shall be readily available.
      (B) The determination of whether acceptable operation and maintenance procedures are being used for the temperature monitoring device will be based on information that may include, but is not limited to, review of operation and maintenance procedures, operation and maintenance records, manufacturer's recommendations and specifications, and inspection of the temperature monitoring device.
   iii. The temperature monitoring devices installed on the thermal oxidizers **(ID Nos. CD-AH20-B-10U01 and CD-3420-U01)** shall be installed and operational, and the data verified either prior to or in conjunction with conducting performance tests. Verification of operational status shall, at a minimum, include completion of the manufacturer's written specifications or recommendations for installation, operation, and calibration of the system or other written procedures that provide adequate assurance that the equipment would reasonably be expected to monitor accurately.
   iv. The temperature monitoring devices shall be installed such that representative temperature measurements are obtained.
   v. Except for system breakdowns, repairs, maintenance periods, instrument adjustments, or checks to maintain precision and accuracy, calibration checks, and zero and span adjustments, the temperature monitoring devices shall be in continuous operation when emissions are being routed to the monitored device.
   vi. The Permittee shall establish a temperature range that indicates proper operation of the thermal oxidizers **(ID Nos. CD-AH20-B-10Y01 and CD-3420-U01)**. In order to establish the range, the Permittee shall submit the following information in a permit application. The range may be based upon a performance test meeting the specifications of Section 2.2 B.1.q, B.1.r, and B.1.s, above.
      (A) The specific temperature range;
      (B) The rationale for the specific temperature range, including any data and calculations used to develop the range and a description of why the range indicates proper operation of the thermal oxidizers. The range shall be based on the parameter values measured during the performance tests and may be supplemented by engineering assessments and/or manufacturer's recommendations. Performance testing is not required to be conducted over the entire range of permitted temperature values.
      (C) A definition of the CMPU **(CP1 and CP2, as described above)** operating day for purposes of determining daily average temperature values. The definition shall specify the times at which an operating day begins and ends.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the thermal oxidizers are not monitored as required above.

Incinerator Recordkeeping

v. Upon request, the Permittee shall make available the records necessary to determine the condition of the performance tests conducted as specified in Section 2.2 B.1.q through B.1.s, above. The Permittee shall keep up-to-date, readily available continuous records of the following, measured during each performance test conducted according to Section 2.2 B.1.q through B.1.s, above. [40 CFR 63.998(a)(2)(ii)]
   i. The firebox temperatures of the thermal oxidizers **(ID Nos. CD-AH20-B-10U01 and CD-3420-U01)** averaged over the full period of the performance test.
   ii. The percent reduction of organic HAP determined as specified in Section 2.2 B.1.r.iv, above.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the records of performance test conditions are not retained as required above.

w. The Permittee shall maintain continuous records and monitoring system data according to the following: [40 CFR 63.998(b) and (c)]
   i. A record of values measured at least once every 15 minutes or each measured value for systems which measure more frequently than once every 15 minutes; or
   ii. A record of block average values for 15-minute or shorter periods calculated from all measured data values during each period or from at least one measured data value per minute if measured more frequently than once per minute.
   iii. If data are collected from an automated continuous parameter monitoring system, the Permittee may calculate and retain block hourly average values from each 15-minute block average period or from at least one measured value per minute if measured more frequently than once per minute, and discard all but the most recent three valid hours of continuous (15-minute or shorter) records, if the hourly averages do not exclude periods of CPMS breakdown or malfunction. An automated CPMS records the measured data and calculates the hourly averages through the use of a computerized data acquisition system.
   iv. Daily average values of the thermal oxidizer firebox temperature shall be calculated from data meeting the specifications in paragraph (v), below, for each operating day. Daily averages apply at all times except during startup and shutdown. During each period of startup and shutdown, the Permittee shall determine separate averages.
      (A) If all recorded firebox temperature values during an operating day are within the range established in Section 2.2 B.1.u, above, the Permittee may record that all values were within the range rather than calculating and recording a daily average for that operating day. In such cases, the Permittee shall not discard the recorded values as allowed in paragraph (iii), above.
      (B) The Permittee shall keep records of periods of operation during which the average temperature boundary established in Section 2.2 B.1.u, above, is exceeded.
   v. Monitoring data recorded during the following periods shall not be included in any average computed to determine compliance with the emission limit specified in Section 2.2 B.1.b, above.
      (A) Monitoring system breakdowns, repairs, preventive maintenance, calibration checks, and zero (low-level) and high-level adjustments; and
      (B) Periods of non-operation of the process unit (or portion thereof), resulting in cessation of the emissions to which the monitoring applies.
   vi. As an alternative, the Permittee may choose to comply with the alternative recordkeeping requirements in 40 CFR 63.998(b)(5).

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if continuous monitoring data records are not retained as required above.

x. The Permittee shall maintain the following monitoring system records for the temperature monitoring records installed on the thermal oxidizers **(ID Nos. CD-AH20-B-10U01 and CD-3420-U01)**. [40 CFR 63.998(c)]

i. A record of the procedure used for calibrating the temperature monitoring system.
ii. Records of the information specified in the following paragraphs:
(A) The date and time of completion of calibration and preventive maintenance of the temperature monitoring system.
(B) The "as found" and "as left" CPMS readings, whenever an adjustment is made that affects the temperature monitoring device reading and a "no adjustment" statement otherwise.
(C) The start time and duration or start and stop times of any periods when the temperature monitoring system is inoperative.
(D) Records of the occurrence and duration of each start-up, shutdown, and malfunction of the temperature monitoring system in which excess emissions occur.
(E) Records documenting each start-up, shutdown, and malfunction event.
(F) Records of temperature monitoring system start-up, shutdown, and malfunction event that specify that there were no excess emissions during the event, as applicable.
(G) Records of the total duration of operating time.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if monitoring system records are not retained as required above.

WASTEWATER STREAMS

Wastewater System Operating Requirements [15A NCAC 02D .1111]

y. The Permittee shall determine the total concentration of partially soluble HAP in each wastewater stream using process knowledge, engineering assessment, or test data for all wastewater streams from each CMPU **(CP1 and CP2, described above)**. Partially soluble HAP are listed in Table 7 to 40 CFR Part 63, Subpart VVVVVV. The Permittee shall reevaluate the concentration if any process or operational changes are made that would affect the concentration of partially soluble HAP in a wastewater stream. It is not required to determine the partially soluble concentration in wastewater if the entire wastewater stream is hard piped to a combustion unit or onsite treatment as a hazardous waste or hard piped to a point of transfer to onsite or offsite hazardous waste treatment. [40 CFR 63.11498(a) and Table 6 (Item 2.b) and Table 7 to 40 CFR Part 63, Subpart VVVVVV]. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the partially soluble HAP concentration in each wastewater stream is not determined as required above.

z. The Permittee shall comply with the following requirements for wastewater systems from each CMPU **(CP1 and CP2, described above)**. [40 CFR 63.11498(a) and Table 6 to 40 CFR Part 63, Subpart VVVVVV]
i. The Permittee shall discharge each wastewater stream to onsite or offsite wastewater treatment or hazardous waste treatment and maintain the records in Section 2.2 B.1.aa, below.
ii. Wastewater streams containing partially soluble HAP at a concentration equal to or greater than 10,000 parts per million by weight and separate organic and water phases shall use a decanter, steam stripper, thin film evaporator, or distillation unit to separate the water phase from the organic phase(s) and comply with the following requirements:
(A) For the water phase, comply with the requirements in Section 2.2 B.1.z.i, and
(B) For the organic phase(s), recycle to a process, use as fuel, or dispose as hazardous waste either onsite or offsite, and
(C) Keep records of the wastewater streams subject to this requirement and the disposition of the organic phase(s).
iii. Separated organic material that is recycled to a process is no longer wastewater and no longer subject to the wastewater requirements after it has been recycled.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the wastewater system requirements are not met as required above.

Wastewater Recordkeeping [15A NCAC 02D .1111]

aa. The Permittee shall maintain records identifying each wastewater stream and documenting the type of treatment that it receives. Multiple wastewater streams with similar characteristics and from the same type of activity in each CMPU **(CP1 and CP2, described above)** may be grouped together for recordkeeping purposes. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if wastewater system records are not maintained as required above.

GENERAL RECORDKEEPING AND REPORTING

Recordkeeping [15A NCAC 02D .1111]

bb. The Permittee shall retain files of all information (including all reports and notifications) required to comply with 40 CFR Part 63, Subpart VVVVVV for at least 5 years following the date of each occurrence, recorded in a form suitable and readily available for expeditious inspection and review. At a minimum, the Permittee shall retain the most recent 2 years of data on site. The remaining 3 years of data may be retained off site. Such files may be maintained on electronic media. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if records are not retained as required above.

cc. The Permittee shall maintain the following records: [40 CFR 63.10(b)(2)(iii) and (b)(2)(vi) through (b)(2)(xiv)]
   i. All required maintenance performed on the air pollution control and monitoring equipment;
   ii. Each period during which the temperature monitor installed on the thermal oxidizers **(ID Nos. CD-AH20-B-10U01 and CD-3420-U01)** is malfunctioning or inoperative (including out-of-control periods);
   iii. All required measurements needed to demonstrate compliance with the emission limitations in Section 2.2 B.1.b (including, but not limited to, 15-minute averages of temperature monitoring data, raw performance testing measurements, and raw performance evaluation measurements, that support data that the source is required to report);
   iv. All results of performance tests, and temperature monitoring performance evaluations;
   v. All measurements as may be necessary to determine the conditions of performance tests and performance evaluations;
   vi. All temperature monitor calibration checks;
   vii. All adjustments and maintenance performed on the temperature monitors;
   viii. All documentation supporting initial notifications and notifications of compliance status.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if records are not retained as required above.

Reporting

dd. The Permittee shall submit a summary report of the monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. The following information shall be included in the summary report and are required only for semiannual periods during which any of the following events occurred. [40 CFR 63.11501(d) and 63.999(c)]
   i. Any deviation from the requirements of this permit must be clearly identified.
   ii. The following information for each delay of leak repair beyond 15 days for any process equipment in the CMPU **(CP1 and CP2, as described above)**:
      (A) Information on the date the leak was identified;
      (B) The reason for the delay in repair; and
      (C) The date the leak was repaired.
   iii. Each process change that affects a compliance determination and submit a new certification of compliance with the applicable requirements in accordance with the procedures specified for the Notification of Compliance Status in 40 CFR 63.11501(b).

iv. If a malfunction occurred during the reporting period, the report must include the number of instances of malfunctions that caused emissions in excess of a standard. For each malfunction that caused emissions in excess of a standard, the report must include a list of the affected sources or equipment, an estimate of the volume of each regulated pollutant emitted over the standard, and a description of the method used to estimate the emissions. The report must also include a description of actions you took during a malfunction of an affected source to minimize emissions in accordance with Section 2.2 B.1.f, above, including actions taken to correct a malfunction.

v. Reporting period dates, the total source operating time for the reporting period, and periods when thermal oxidizer temperature is outside the established range.

vi. The following information for closed vent systems:
(A) The information recorded according to Section 2.2 B.1.o.iii, above;
(B) Reports of the times of all periods recorded according to Section 2.2 B.1.o.ii.(A), above, when the vent stream is diverted away from the thermal oxidizers through a bypass line; and
(C) Reports of all times recorded according to Section 2.2 B.1.o.ii.(B), above, when maintenance is performed in car-sealed valves, when the seal is broken, when the bypass line valve position is changed, or the key for the lock-and-key type configuration has been checked out.

vii. Daily average temperature, calculated as specified in Section 2.2 B.1.w.iv, above, for any days when the daily average value is outside the bounds as defined in Section 2.2 B.1.w.iv, above, or the data availability requirements defined below. For excursions caused by lack of monitoring data, the duration of periods when monitoring data were not collected shall be specified. An excursion means any of the cases listed in paragraphs (A) through (C), below.
(A) When the daily average value of one or more monitored parameters is outside the permitted range.
(B) When the period of control or recovery device operation is 4 hours or greater in an operating day and monitoring data are insufficient to constitute a valid hour of data for at least 75 percent of the operating hours.
(C) When the period of control or recovery device operation is less than 4 hours in an operating day and more than one of the hours during the period of operation does not constitute a valid hour of data due to insufficient monitoring data.
(D) Monitoring data are insufficient to constitute a valid hour of data as used in paragraphs (B) and (C), above, if measured values are unavailable for any of the 15-minute periods within the hour.

viii. If a backup temperature monitoring system is used, the Permittee shall report the results from the temperature monitoring system used to meet the monitoring requirements of Section 2.2 B.1.t and B.1.u, above. If both the backup and primary temperature monitoring systems are used during a particular reporting period to meet the monitoring requirements of Section 2.2 B.1.t and B.1.u, above, then the Permittee shall report the results from each temperature monitoring system for the time during the six-month period that the instrument was relied upon to demonstrate compliance. [40 CFR 63.996(b)(2)]

ix. If the owner or operator has chosen to use the alternative recordkeeping requirements Section 2.2 B.1.w.vi, above, and has not notified the Administrator in the Notification of Compliance Status that the alternative recordkeeping provisions are being implemented, the owner or operator shall notify the Administrator in the Periodic Report submitted immediately preceding implementation of the alternative. The notifications specified in 40 CFR 63.998(b)(5)(ii) shall be included in the next Periodic Report following the identified event.

ee. The Permittee shall submit performance test reports as follows: [40 CFR 63.999(a)(2)]
i. The performance test report shall include one complete test report for each test method used on the thermal oxidizers.
ii. A complete test report shall include a brief process description, sampling site description, description of sampling and analysis procedures and any modifications to standard procedures, quality assurance procedures, record of operating conditions during the test, record of preparation of standards, record

of calibrations, raw data sheets for field sampling, raw data sheets for field and laboratory analyses, documentation of calculations, and any other information required by the test method.

iii. The performance test report shall also include the records specified in Section 2.2 B.1.v.i, above.

SECTION 3 - GENERAL CONDITIONS (version 4.0 12/17/15)

This section describes terms and conditions applicable to this Title V facility.

A. **General Provisions** [NCGS 143-215 and 15A NCAC 02Q .0508(i)(16)]
1. Terms not otherwise defined in this permit shall have the meaning assigned to such terms as defined in 15A NCAC 02D and 02Q.
2. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are binding and enforceable pursuant to NCGS 143-215.114A and 143-215.114B, including assessment of civil and/or criminal penalties. Any unauthorized deviation from the conditions of this permit may constitute grounds for revocation and/or enforcement action by the DAQ.
3. This permit is not a waiver of or approval of any other Department permits that may be required for other aspects of the facility which are not addressed in this permit.
4. This permit does not relieve the Permittee from liability for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted facility, or from penalties therefore, nor does it allow the Permittee to cause pollution in contravention of state laws or rules, unless specifically authorized by an order from the North Carolina Environmental Management Commission.
5. Except as identified as state-only requirements in this permit, all terms and conditions contained herein shall be enforceable by the DAQ, the EPA, and citizens of the United States as defined in the Federal Clean Air Act.
6. Any stationary source of air pollution shall not be operated, maintained, or modified without the appropriate and valid permits issued by the DAQ, unless the source is exempted by rule. The DAQ may issue a permit only after it receives reasonable assurance that the installation will not cause air pollution in violation of any of the applicable requirements. A permitted installation may only be operated, maintained, constructed, expanded, or modified in a manner that is consistent with the terms of this permit.

B. **Permit Availability** [15A NCAC 02Q .0507(k) and .0508(i)(9)(B)]
The Permittee shall have available at the facility a copy of this permit and shall retain for the duration of the permit term one complete copy of the application and any information submitted in support of the application package. The permit and application shall be made available to an authorized representative of Department of Environmental Quality upon request.

C. **Severability Clause** [15A NCAC 02Q .0508(i)(2)]
In the event of an administrative challenge to a final and binding permit in which a condition is held to be invalid, the provisions in this permit are severable so that all requirements contained in the permit, except those held to be invalid, shall remain valid and must be complied with.

D. **Submissions** [15A NCAC 02Q .0507(e) and 02Q .0508(i)(16)]
Except as otherwise specified herein, two copies of all documents, reports, test data, monitoring data, notifications, request for renewal, and any other information required by this permit shall be submitted to the appropriate Regional Office. Refer to the Regional Office address on the cover page of this permit. For continuous emissions monitoring systems (CEMS) reports, continuous opacity monitoring systems (COMS) reports, quality assurance (QA)/quality control (QC) reports, acid rain CEM certification reports, and NOx budget CEM certification reports, one copy shall be sent to the appropriate Regional Office and one copy shall be sent to:

Supervisor, Stationary Source Compliance
North Carolina Division of Air Quality
1641 Mail Service Center
Raleigh, NC 27699-1641

All submittals shall include the facility name and Facility ID number (refer to the cover page of this permit).

E. **Duty to Comply** [15A NCAC 02Q .0508(i)(3)]
The Permittee shall comply with all terms, conditions, requirements, limitations and restrictions set forth in this permit. Noncompliance with any permit condition except conditions identified as state-only requirements constitutes a violation of the Federal Clean Air Act. Noncompliance with any permit condition is grounds for enforcement action, for permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application.

F. **Circumvention** - STATE ENFORCEABLE ONLY
The facility shall be properly operated and maintained at all times in a manner that will effect an overall reduction in air pollution. Unless otherwise specified by this permit, no emission source may be operated without the concurrent operation of its associated air pollution control device(s) and appurtenances.

G. **Permit Modifications**
1. Administrative Permit Amendments [15A NCAC 02Q .0514]
The Permittee shall submit an application for an administrative permit amendment in accordance with 15A NCAC 02Q .0514.
2. Transfer in Ownership or Operation and Application Submittal Content [15A NCAC 02Q .0524 and 02Q .0505]
The Permittee shall submit an application for an ownership change in accordance with 15A NCAC 02Q.0524 and 02Q .0505.
3. Minor Permit Modifications [15A NCAC 02Q .0515]
The Permittee shall submit an application for a minor permit modification in accordance with 15A NCAC 02Q .0515.
4. Significant Permit Modifications [15A NCAC 02Q .0516]
The Permittee shall submit an application for a significant permit modification in accordance with 15A NCAC 02Q .0516.
5. Reopening for Cause [15A NCAC 02Q .0517]
The Permittee shall submit an application for reopening for cause in accordance with 15A NCAC 02Q .0517.

H. **Changes Not Requiring Permit Modifications**
1. Reporting Requirements
Any of the following that would result in new or increased emissions from the emission source(s) listed in Section 1 must be reported to the Regional Supervisor, DAQ:
   a. changes in the information submitted in the application;
   b. changes that modify equipment or processes; or
   c. changes in the quantity or quality of materials processed.

   If appropriate, modifications to the permit may then be made by the DAQ to reflect any necessary changes in the permit conditions. In no case are any new or increased emissions allowed that will cause a violation of the emission limitations specified herein.

2. Section 502(b)(10) Changes [15A NCAC 02Q .0523(a)]
   a. "Section 502(b)(10) changes" means changes that contravene an express permit term or condition. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
   b. The Permittee may make Section 502(b)(10) changes without having the permit revised if:
      i. the changes are not a modification under Title I of the Federal Clean Air Act;
      ii. the changes do not cause the allowable emissions under the permit to be exceeded;

iii. the Permittee notifies the Director and EPA with written notification at least seven days before the change is made; and
iv. the Permittee shall attach the notice to the relevant permit.

c. The written notification shall include:
i. a description of the change;
ii. the date on which the change will occur;
iii. any change in emissions; and
iv. any permit term or condition that is no longer applicable as a result of the change.

d. Section 502(b)(10) changes shall be made in the permit the next time that the permit is revised or renewed, whichever comes first.

3. Off Permit Changes [15A NCAC 02Q .0523(b)]
The Permittee may make changes in the operation or emissions without revising the permit if:
a. the change affects only insignificant activities and the activities remain insignificant after the change; or
b. the change is not covered under any applicable requirement.

4. Emissions Trading [15A NCAC 02Q .0523(c)]
To the extent that emissions trading is allowed under 15A NCAC 02D, including subsequently adopted maximum achievable control technology standards, emissions trading shall be allowed without permit revision pursuant to 15A NCAC 02Q .0523(c).

I.A **Reporting Requirements for Excess Emissions and Permit Deviations** [15A NCAC 02D .0535(f) and 02Q .0508(f)(2)]
"Excess Emissions" - means an emission rate that exceeds any applicable emission limitation or standard allowed by any rule in Sections .0500, .0900, .1200, or .1400 of Subchapter 02D; or by a permit condition; or that exceeds an emission limit established in a permit issued under 15A NCAC 02Q .0700. *(Note: Definitions of excess emissions under 02D .1110 and 02D .1111 shall apply where defined by rule.)*

"Deviations" - for the purposes of this condition, any action or condition not in accordance with the terms and conditions of this permit including those attributable to upset conditions as well as excess emissions as defined above lasting less than four hours.

Excess Emissions

1. If a source is required to report excess emissions under NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or the operating permit provides for periodic (e.g., quarterly) reporting of excess emissions, reporting shall be performed as prescribed therein.
2. If the source is not subject to NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or these rules do NOT define "excess emissions," the Permittee shall report excess emissions in accordance with 15A NCAC 02D .0535 as follows:
a. Pursuant to 15A NCAC 02D .0535, if excess emissions last for more than four hours resulting from a malfunction, a breakdown of process or control equipment, or any other abnormal condition, the owner or operator shall:
i. notify the Regional Supervisor or Director of any such occurrence by 9:00 a.m. Eastern Time of the Division's next business day of becoming aware of the occurrence and provide:
- name and location of the facility;
- nature and cause of the malfunction or breakdown;
- time when the malfunction or breakdown is first observed;
- expected duration; and
- estimated rate of emissions;

ii. notify the Regional Supervisor or Director immediately when corrective measures have been accomplished; and
iii. submit to the Regional Supervisor or Director within 15 days a written report as described in 15A NCAC 02D .0535(f)(3).

Permit Deviations

3. Pursuant to 15A NCAC 02Q .0508(f)(2), the Permittee shall report deviations from permit requirements (terms and conditions) as follows:
   a. Notify the Regional Supervisor or Director of all other deviations from permit requirements not covered under 15A NCAC 02D .0535 quarterly. A written report to the Regional Supervisor shall include the probable cause of such deviation and any corrective actions or preventative actions taken. The responsible official shall certify all deviations from permit requirements.

I.B **Other Requirements under 15A NCAC 02D .0535**

The Permittee shall comply with all other applicable requirements contained in 15A NCAC 02D .0535, including 15A NCAC 02D .0535(c) as follows:

1. Any excess emissions that do not occur during start-up and shut-down shall be considered a violation of the appropriate rule unless the owner or operator of the sources demonstrates to the Director, that the excess emissions are a result of a malfunction. The Director shall consider, along with any other pertinent information, the criteria contained in 15A NCAC 02D .0535(c)(1) through (7).
2. 15A NCAC 02D .0535(g). Excess emissions during start-up and shut-down shall be considered a violation of the appropriate rule if the owner or operator cannot demonstrate that excess emissions are unavoidable.

J. **Emergency Provisions** [40 CFR 70.6(g)]

The Permittee shall be subject to the following provisions with respect to emergencies:

1. An emergency means any situation arising from sudden and reasonably unforeseeable events beyond the control of the facility, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the facility to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.
2. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in 3. below are met.
3. The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that include information as follows:
   a. an emergency occurred and the Permittee can identify the cause(s) of the emergency;
   b. the permitted facility was at the time being properly operated;
   c. during the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the standards or other requirements in the permit; and
   d. the Permittee submitted notice of the emergency to the DAQ within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
4. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
5. This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein.

K. **Permit Renewal** [15A NCAC 02Q .0508(e) and 02Q .0513(b)]

This 15A NCAC 02Q .0500 permit is issued for a fixed term not to exceed five years and shall expire at the end of its term. Permit expiration terminates the facility's right to operate unless a complete 15A NCAC 02Q .0500 renewal application is submitted at least nine months before the date of permit expiration. If the Permittee or applicant has complied with 15A NCAC 02Q .0512(b)(1), this 15A NCAC 02Q .0500 permit shall not expire until the renewal permit has been issued or denied. Permit expiration under 15A NCAC 02Q .0400 terminates the facility's right to operate unless a complete 15A NCAC 02Q .0400 renewal application is submitted at least six months before the date of permit expiration for facilities subject to 15A NCAC 02Q .0400 requirements. In

either of these events, all terms and conditions of these permits shall remain in effect until the renewal permits have been issued or denied.

L. **Need to Halt or Reduce Activity Not a Defense** [15A NCAC 02Q .0508(i)(4)]
It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

M. **Duty to Provide Information (submittal of information)** [15A NCAC 02Q .0508(i)(9)]
1. The Permittee shall furnish to the DAQ, in a timely manner, any reasonable information that the Director may request in **writing** to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit.
2. The Permittee shall furnish the DAQ copies of records required to be kept by the permit when such copies are requested by the Director. For information claimed to be confidential, the Permittee may furnish such records directly to the EPA upon request along with a claim of confidentiality.

N. **Duty to Supplement** [15A NCAC 02Q .0507(f)]
The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the DAQ. The Permittee shall also provide additional information as necessary to address any requirement that becomes applicable to the facility after the date a complete permit application was submitted but prior to the release of the draft permit.

O. **Retention of Records** [15A NCAC 02Q .0508(f) and 02Q .0508 (l)]
The Permittee shall retain records of all required monitoring data and supporting information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring information, and copies of all reports required by the permit. These records shall be maintained in a form suitable and readily available for expeditious inspection and review. Any records required by the conditions of this permit shall be kept on site and made available to DAQ personnel for inspection upon request.

P. **Compliance Certification** [15A NCAC 02Q .0508(n)]
The Permittee shall submit to the DAQ and the EPA (Air and EPCRA Enforcement Branch, EPA, Region 4, 61 Forsyth Street SW, Atlanta, GA 30303) postmarked on or before March 1 a compliance certification (for the preceding calendar year) by a responsible official with all federally-enforceable terms and conditions in the permit, including emissions limitations, standards, or work practices. It shall be the responsibility of the current owner to submit a compliance certification for the entire year regardless of who owned the facility during the year. The compliance certification shall comply with additional requirements as may be specified under Sections 114(a)(3) or 504(b) of the Federal Clean Air Act. The compliance certification shall specify:
1. the identification of each term or condition of the permit that is the basis of the certification;
2. the compliance status (with the terms and conditions of the permit for the period covered by the certification);
3. whether compliance was continuous or intermittent; and
4. the method(s) used for determining the compliance status of the source during the certification period.

Q. **Certification by Responsible Official** [15A NCAC 02Q .0520]
A responsible official shall certify the truth, accuracy, and completeness of any application form, report, or compliance certification required by this permit. All certifications shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

R. **Permit Shield for Applicable Requirements** [15A NCAC 02Q .0512]
1. Compliance with the terms and conditions of this permit shall be deemed compliance with applicable requirements, where such applicable requirements are included and specifically identified in the permit as of the date of permit issuance.
2. A permit shield shall not alter or affect:
   a. the power of the Commission, Secretary of the Department, or Governor under NCGS 143-215.3(a)(12), or EPA under Section 303 of the Federal Clean Air Act;
   b. the liability of an owner or operator of a facility for any violation of applicable requirements prior to the effective date of the permit or at the time of permit issuance;
   c. the applicable requirements under Title IV; or
   d. the ability of the Director or the EPA under Section 114 of the Federal Clean Air Act to obtain information to determine compliance of the facility with its permit.
3. A permit shield does not apply to any change made at a facility that does not require a permit or permit revision made under 15A NCAC 02Q .0523.
4. A permit shield does not extend to minor permit modifications made under 15A NCAC 02Q .0515.

S. **Termination, Modification, and Revocation of the Permit** [15A NCAC 02Q .0519]
The Director may terminate, modify, or revoke and reissue this permit if:
1. the information contained in the application or presented in support thereof is determined to be incorrect;
2. the conditions under which the permit or permit renewal was granted have changed;
3. violations of conditions contained in the permit have occurred;
4. the EPA requests that the permit be revoked under 40 CFR 70.7(g) or 70.8(d); or
5. the Director finds that termination, modification, or revocation and reissuance of the permit is necessary to carry out the purpose of NCGS Chapter 143, Article 21B.

T. **Insignificant Activities** [15A NCAC 02Q .0503]
Because an emission source or activity is insignificant does not mean that the emission source or activity is exempted from any applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement. The Permittee shall have available at the facility at all times and made available to an authorized representative upon request, documentation, including calculations, if necessary, to demonstrate that an emission source or activity is insignificant.

U. **Property Rights** [15A NCAC 02Q .0508(i)(8)]
This permit does not convey any property rights in either real or personal property or any exclusive privileges.

V. **Inspection and Entry** [15A NCAC 02Q .0508(l) and NCGS 143-215.3(a)(2)]
1. Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow the DAQ, or an authorized representative, to perform the following:
   a. enter the Permittee's premises where the permitted facility is located or emissions-related activity is conducted, or where records are kept under the conditions of the permit;
   b. have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
   c. inspect at reasonable times and using reasonable safety practices any source, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
   d. sample or monitor substances or parameters, using reasonable safety practices, for the purpose of assuring compliance with the permit or applicable requirements at reasonable times.

   Nothing in this condition shall limit the ability of the EPA to inspect or enter the premises of the Permittee under Section 114 or other provisions of the Federal Clean Air Act.
2. No person shall refuse entry or access to any authorized representative of the DAQ who requests entry for purposes of inspection, and who presents appropriate credentials, nor shall any person obstruct, hamper, or

interfere with any such authorized representative while in the process of carrying out his official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

W. **Annual Fee Payment** [15A NCAC 02Q .0508(i)(10)]
1. The Permittee shall pay all fees in accordance with 15A NCAC 02Q .0200.
2. Payment of fees may be by check or money order made payable to the N.C. Department of Environmental Quality. Annual permit fee payments shall refer to the permit number.
3. If, within 30 days after being billed, the Permittee fails to pay an annual fee, the Director may initiate action to terminate the permit under 15A NCAC 02Q .0519.

X. **Annual Emission Inventory Requirements** [15A NCAC 02Q .0207]
The Permittee shall report by **June 30 of each year** the actual emissions of each air pollutant listed in 15A NCAC 02Q .0207(a) from each emission source within the facility during the previous calendar year. The report shall be in or on such form as may be established by the Director. The accuracy of the report shall be certified by a responsible official of the facility.

Y. **Confidential Information** [15A NCAC 02Q .0107 and 02Q. 0508(i)(9)]
Whenever the Permittee submits information under a claim of confidentiality pursuant to 15A NCAC 02Q .0107, the Permittee may also submit a copy of all such information and claim directly to the EPA upon request. All requests for confidentiality must be in accordance with 15A NCAC 02Q .0107.

Z. **Construction and Operation Permits** [15A NCAC 02Q .0100 and .0300]
A construction and operating permit shall be obtained by the Permittee for any proposed new or modified facility or emission source which is not exempted from having a permit prior to the beginning of construction or modification, in accordance with all applicable provisions of 15A NCAC 02Q .0100 and .0300.

AA. **Standard Application Form and Required Information** [15A NCAC 02Q .0505 and .0507]
The Permittee shall submit applications and required information in accordance with the provisions of 15A NCAC 02Q .0505 and .0507.

BB. **Financial Responsibility and Compliance History [**15A NCAC 02Q .0507(d)(4)]
The DAQ may require an applicant to submit a statement of financial qualifications and/or a statement of substantial compliance history.

CC. **Refrigerant Requirements (Stratospheric Ozone and Climate Protection)** [15A NCAC 02Q .0501(e)]
1. If the Permittee has appliances or refrigeration equipment, including air conditioning equipment, which use Class I or II ozone-depleting substances such as chlorofluorocarbons and hydrochlorofluorocarbons listed as refrigerants in 40 CFR Part 82 Subpart A Appendices A and B, the Permittee shall service, repair, and maintain such equipment according to the work practices, personnel certification requirements, and certified recycling and recovery equipment specified in 40 CFR Part 82 Subpart F.
2. The Permittee shall not knowingly vent or otherwise release any Class I or II substance into the environment during the repair, servicing, maintenance, or disposal of any such device except as provided in 40 CFR Part 82 Subpart F.
3. The Permittee shall comply with all reporting and recordkeeping requirements of 40 CFR 82.166. Reports shall be submitted to the EPA or its designee as required.

DD. **Prevention of Accidental Releases - Section 112(r)** [15A NCAC 02Q .0508(h)]
If the Permittee is required to develop and register a Risk Management Plan with EPA pursuant to Section 112(r) of the Clean Air Act, then the Permittee is required to register this plan in accordance with 40 CFR Part 68.

EE. **Prevention of Accidental Releases General Duty Clause - Section 112(r)(1)** – FEDERALLY-ENFORCEABLE ONLY
Although a risk management plan may not be required, if the Permittee produces, processes, handles, or stores any amount of a listed hazardous substance, the Permittee has a general duty to take such steps as are necessary to prevent the accidental release of such substance and to minimize the consequences of any release.

FF. **Title IV Allowances** [15A NCAC 02Q .0508(i)(1)]
This permit does not limit the number of Title IV allowances held by the Permittee, but the Permittee may not use allowances as a defense to noncompliance with any other applicable requirement. The Permittee's emissions may not exceed any allowances that the facility lawfully holds under Title IV of the Federal Clean Air Act.

GG. **Air Pollution Emergency Episode** [15A NCAC 02D .0300]
Should the Director of the DAQ declare an Air Pollution Emergency Episode, the Permittee will be required to operate in accordance with the Permittee's previously approved Emission Reduction Plan or, in the absence of an approved plan, with the appropriate requirements specified in 15A NCAC 02D .0300.

HH. **Registration of Air Pollution Sources** [15A NCAC 02D .0202]
The Director of the DAQ may require the Permittee to register a source of air pollution. If the Permittee is required to register a source of air pollution, this registration and required information will be in accordance with 15A NCAC 02D .0202(b).

II. **Ambient Air Quality Standards** [15A NCAC 02D .0501(c)]
In addition to any control or manner of operation necessary to meet emission standards specified in this permit, any source of air pollution shall be operated with such control or in such manner that the source shall not cause the ambient air quality standards in 15A NCAC 02D .0400 to be exceeded at any point beyond the premises on which the source is located. When controls more stringent than named in the applicable emission standards in this permit are required to prevent violation of the ambient air quality standards or are required to create an offset, the permit shall contain a condition requiring these controls.

JJ. **General Emissions Testing and Reporting Requirements** [15A NCAC 02Q .0508(i)(16)]
Emission compliance testing shall be by the procedures of Section .2600, except as may be otherwise required in Rules .0524, .0912, .1110, .1111, or .1415 of Subchapter 02D. If emissions testing is required by this permit or the DAQ or if the Permittee submits emissions testing to the DAQ to demonstrate compliance, the Permittee shall perform such testing in accordance with 15A NCAC 02D .2600 and follow the procedures outlined below:

1. The owner or operator of the source shall arrange for air emission testing protocols to be provided to the Director prior to air pollution testing. Testing protocols are not required to be pre-approved by the Director prior to air pollution testing. The Director shall review air emission testing protocols for pre-approval prior to testing if requested by the owner or operator at least **45 days** before conducting the test.
2. Any person proposing to conduct an emissions test to demonstrate compliance with an applicable standard shall notify the Director at least **15 days** before beginning the test so that the Director may at his option observe the test.
3. The owner or operator of the source shall arrange for controlling and measuring the production rates during the period of air testing. The owner or operator of the source shall ensure that the equipment or process being tested is operated at the production rate that best fulfills the purpose of the test. The individual conducting the emission test shall describe the procedures used to obtain accurate process data and include in the test report the average production rates determined during each testing period.
4. Two copies of the final air emission test report shall be submitted to the Director not later than **30 days** after sample collection unless otherwise specified in the specific conditions. The owner or operator may request an extension to submit the final test report. The Director shall approve an extension request if he finds that the extension request is a result of actions beyond the control of the owner or operator.

a. The Director shall make the final determination regarding any testing procedure deviation and the validity of the compliance test. The Director may:
   i. Allow deviations from a method specified under a rule in this Section if the owner or operator of the source being tested demonstrates to the satisfaction of the Director that the specified method is inappropriate for the source being tested.
   ii. Prescribe alternate test procedures on an individual basis when he finds that the alternative method is necessary to secure more reliable test data.
   iii. Prescribe or approve methods on an individual basis for sources or pollutants for which no test method is specified in this Section if the methods can be demonstrated to determine compliance of permitted emission sources or pollutants.
b. The Director may authorize the Division of Air Quality to conduct independent tests of any source subject to a rule in this Subchapter to determine the compliance status of that source or to verify any test data submitted relating to that source. Any test conducted by the Division of Air Quality using the appropriate testing procedures described in Section 02D .2600 has precedence over all other tests.

KK. **Reopening for Cause** [15A NCAC 02Q .0517]

1. A permit shall be reopened and revised under the following circumstances:
   a. additional applicable requirements become applicable to a facility with remaining permit term of three or more years;
   b. additional requirements (including excess emission requirements) become applicable to a source covered by Title IV;
   c. the Director or EPA finds that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
   d. the Director or EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
2. Any permit reopening shall be completed or a revised permit issued within 18 months after the applicable requirement is promulgated. No reopening is required if the effective date of the requirement is after the expiration of the permit term unless the term of the permit was extended pursuant to 15A NCAC 02Q .0513(c).
3. Except for the state-enforceable only portion of the permit, the procedures set out in 15A NCAC 02Q .0507, .0521, or .0522 shall be followed to reissue the permit. If the State-enforceable only portion of the permit is reopened, the procedures in 15A NCAC 02Q .0300 shall be followed. The proceedings shall affect only those parts of the permit for which cause to reopen exists.
4. The Director shall notify the Permittee at least 60 days in advance of the date that the permit is to be reopened, except in cases of imminent threat to public health or safety the notification period may be less than 60 days.
5. Within 90 days, or 180 days if the EPA extends the response period, after receiving notification from the EPA that a permit needs to be terminated, modified, or revoked and reissued, the Director shall send to the EPA a proposed determination of termination, modification, or revocation and reissuance, as appropriate.

LL. **Reporting Requirements for Non-Operating Equipment** [15A NCAC 02Q .0508(i)(16)]

The Permittee shall maintain a record of operation for permitted equipment noting whenever the equipment is taken from and placed into operation. During operation the monitoring recordkeeping and reporting requirements as prescribed by the permit shall be implemented within the monitoring period.

MM. **Fugitive Dust Control Requirement** [15A NCAC 02D .0540] - STATE ENFORCEABLE ONLY

As required by 15A NCAC 02D .0540 "Particulates from Fugitive Dust Emission Sources," the Permittee shall not cause or allow fugitive dust emissions to cause or contribute to substantive complaints or excess visible emissions beyond the property boundary. If substantive complaints or excessive fugitive dust emissions from the facility are observed beyond the property boundaries for six minutes in any one hour (using Reference Method

22 in 40 CFR, Appendix A), the owner or operator may be required to submit a fugitive dust plan as described in 02D .0540(f).

"Fugitive dust emissions" means particulate matter from process operations that does not pass through a process stack or vent and that is generated within plant property boundaries from activities such as: unloading and loading areas, process areas stockpiles, stock pile working, plant parking lots, and plant roads (including access roads and haul roads).

NN. **Specific Permit Modifications** [15A NCAC 02Q.0501 and .0523]

1. For modifications made pursuant to 15A NCAC 02Q .0501(c)(2), the Permittee shall file a Title V Air Quality Permit Application for the air emission source(s) and associated air pollution control device(s) on or before 12 months after commencing operation.
2. For modifications made pursuant to 15A NCAC 02Q .0501(d)(2), the Permittee shall not begin operation of the air emission source(s) and associated air pollution control device(s) until a Title V Air Quality Permit Application is filed and a construction and operation permit following the procedures of Section .0500 (except for Rule .0504 of this Section) is obtained.
3. For modifications made pursuant to 502(b)(10), in accordance with 15A NCAC 02Q .0523(a)(1)(C), the Permittee shall notify the Director and EPA (EPA - Air Planning Branch, 61 Forsyth Street SW, Atlanta, GA 30303) in writing at least seven days before the change is made. The written notification shall include:
    a. a description of the change at the facility;
    b. the date on which the change will occur;
    c. any change in emissions; and
    d. any permit term or condition that is no longer applicable as a result of the change.

In addition to this notification requirement, with the next significant modification or Air Quality Permit renewal, the Permittee shall submit a page "E5" of the application forms signed by the responsible official verifying that the application for the 502(b)(10) change/modification, is true, accurate, and complete. Further note that modifications made pursuant to 502(b)(10) do not relieve the Permittee from satisfying preconstruction requirements.

OO. **Third Party Participation and EPA Review** [15A NCAC 02Q .0521, .0522 and .0525(7)]

For permits modifications subject to 45-day review by the federal Environmental Protection Agency (EPA), EPA's decision to not object to the proposed permit is considered final and binding on the EPA and absent a third party petition, the failure to object is the end of EPA's decision-making process with respect to the revisions to the permit. The time period available to submit a public petition pursuant to 15A NCAC 02Q .0518 begins at the end of the 45-day EPA review period.

ATTACHMENT

List of Acronyms

AOS	Alternate Operating Scenario
BACT	Best Available Control Technology
Btu	British thermal unit
CAA	Clean Air Act
CAIR	Clean Air Interstate Rule
CEM	Continuous Emission Monitor
CFR	Code of Federal Regulations
DAQ	Division of Air Quality
DEQ	Department of Environmental Quality
EMC	Environmental Management Commission
EPA	Environmental Protection Agency
FR	Federal Register
GACT	Generally Available Control Technology
HAP	Hazardous Air Pollutant
MACT	Maximum Achievable Control Technology
NAA	Non-Attainment Area
NCAC	North Carolina Administrative Code
NCGS	North Carolina General Statutes
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_X	Nitrogen Oxides
NSPS	New Source Performance Standard
OAH	Office of Administrative Hearings
PM	Particulate Matter
PM_{10}	Particulate Matter with Nominal Aerodynamic Diameter of 10 Micrometers or Less
POS	Primary Operating Scenario
PSD	Prevention of Significant Deterioration
RACT	Reasonably Available Control Technology
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
tpy	Tons Per Year
VOC	Volatile Organic Compound